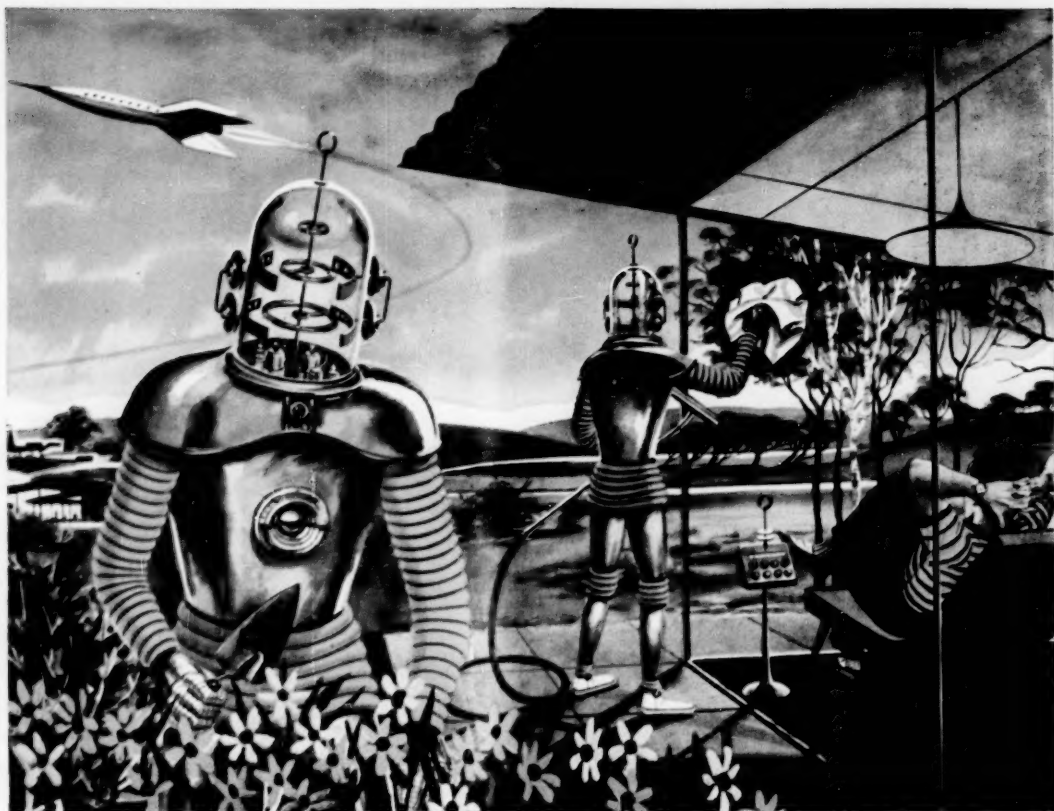


MANUFACTURERS RECORD

Enlightened Self-Interest

For many years the Southern Railway System, along with all other railroads and public utilities serving the South, has been in the forefront of the area's drive for new and diversified industry. Recently, in a statement to the United States Chamber of Commerce, the railroad's president, Harry A. Debutts, said that the Southern "loves" to help in the industrial development of the communities that it serves—and that this is more than a labor of love—there are other good reasons for it.

Quoting from a survey completed in the South, Mr. Debutts told the National Chamber that, for every 100 new factory workers that enter a community, 296 people are added to the population; 112 new households are set up; 51 children are added to the schools' rolls; the working force is increased by 174 people; 4 more retail stores are doing business; there are 107 additional passenger cars on the streets; personal income is increased by \$590,000 annually; retail sales by \$360,000; and bank deposits by \$270,000.



COMPETENT, BLOODLESS WORKERS . . . tireless, economical . . . electronically controlled and directed. These, science predicts, may be our "servants" of the future.

100 years from now...

ROBOTS MAY DO OUR WORK

The years ahead hold many surprises . . . wonderful new products and inventions to challenge the imagination. Then, as now, our water and gas will still be carried by the rugged, dependable cast iron pipe being laid today.

Over 60 American cities and towns are still served by cast iron water and gas mains laid over a hundred years ago. And today, modernized cast iron pipe, centrifugally cast and quality controlled, is even stronger, tougher, more durable.

U.S. Pipe is proud to be one of the leaders in a forward-looking industry whose service to the world is measured in centuries.

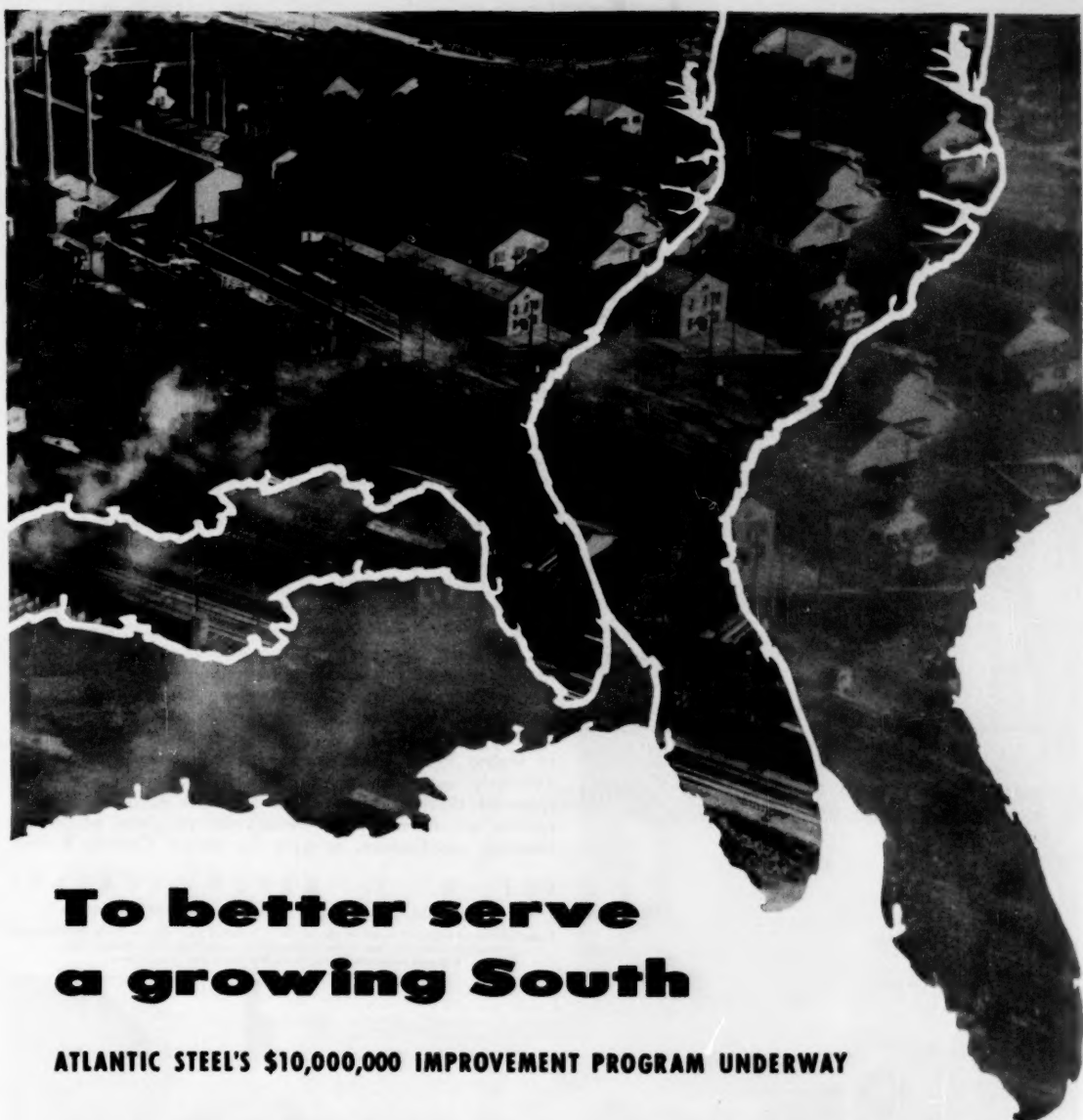
U.S.
cast iron
PIPE

FOR WATER, GAS, SEWERAGE
AND INDUSTRIAL SERVICE

CAST IRON

U. S. PIPE AND FOUNDRY COMPANY, General Office: Birmingham, Alabama

A WHOLLY INTEGRATED PRODUCER FROM MINES AND BLAST FURNACES TO FINISHED PIPE.



To better serve a growing South

ATLANTIC STEEL'S \$10,000,000 IMPROVEMENT PROGRAM UNDERWAY

To better serve the growing South and its increasing number of industries, Atlantic Steel is modernizing and improving its facilities. Here are some of the steps in a \$10,000,000 improvement program:

- A new merchant bar and rod mill costing \$8,735,000 which will increase the range and productive capacity;
- A new 75-ton top charge electric furnace cost-

ing \$750,000 to supplement the first such unit and three open-hearth furnaces;

- A 50% increase in the space of the Warehouse Division to stock additional products, including large structurals.

With the completion of this program, new and additional industries in the South will be served by Atlantic Steel—one of the nation's completely independent steel producers.



ATLANTIC STEEL COMPANY

P.O. Box 1714 • ATLANTA 1, GEORGIA



INSULATED

METAL WALLS

For INDUSTRIAL and COMMERCIAL BUILDINGS

ALUMINUM, STAINLESS or GALVANIZED STEEL

FLUSH, RIBBED, or FLUTED
Over-all "U" Factor of Various Types is Equivalent
To or Better than Conventional 16" Masonry Wall

More and more architects every day are taking advantage of the low-cost permanence of light weight Stainless Steel or Aluminum curtain wall construction. New buildings and complete industrial plants with bright metal exteriors are appearing all over the country. In the past five years, one industrial concern alone has built nine complete new plants employing Mahon Metal Curtain Wall construction throughout—the plant illustrated below is typical. When you plan your next building, call in a Mahon engineer and let him tell you more about Mahon Insulated Metal Walls . . . let him show you some outstanding examples of architectural treatment in ALL-METAL exterior design, or, if you prefer, some attractive exteriors with metal in combination with brick, glass block or other materials. Have him give you cost figures, too . . . because, in this type of construction, important building economies are realized through lower material cost, lower labor cost, and the cumulative savings and advantages deriving from reduced construction time. Mahon Insulated Metal Walls are available in the three exterior patterns . . . the "Fluted" or "Ribbed" wall can be field constructed up to sixty feet in height without a horizontal joint—a feature of Mahon Walls which, from an appearance standpoint, is extremely important in powerhouses, auditoriums or other types of buildings where high expanses of unbroken wall surface are common. See Sweet's for complete information including specifications, or write for Mahon Catalog B-55-B.

THE R. C. MAHON COMPANY

Detroit 34, Mich. • Chicago 4, Ill. • Representatives in All Principal Cities

Manufacturers of Insulated Metal Walls and Wall Panels; Steel Deck for Roofs, Partitions and Permanent Concrete Floor Forms; Rolling Steel Doors, Grilles and Underwriters' Labeled Automatic Rolling Steel Fire Doors and Fire Shutters.



MAHON

MANUFACTURERS RECORD

ESTABLISHED 1882

Devoted to the Industrial Development of the South and Southwest

Volume 124 June, 1955 Number 6

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MANUFACTURERS RECORD PUBLISHING CO.

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Mass Capitalism is Source Of America's Mass Production

On an average business day, nearly one million Americans act as capitalists, investing more than \$250 million of savings in a variety of financial enterprises. It is estimated in "The Story of Creative Capital," a new booklet just published by the Du Pont Company.

Their transactions cover a wide range of investment opportunities, including such familiar ones as buying stocks and bonds, farms, houses to rent, or a small business, putting money in a savings account, paying insurance premiums, and others. Each represents money saved and then put to work. Repeated thousands of times in communities over the nation, their "individual decisions to invest produced a financial avalanche."

Majority of their investments find their way into the industrial economy where "they provide the means to buy more efficient tools and build new plants, and by so doing bring greater industrial output, and with it, more for all. If mass production symbolizes America's unparalleled economic development, it is mass capitalism that has made it possible."

Ten years from now the average man can expect a 20 to 25 per cent improvement in his living standard, if incentives are strong enough to pull the necessary flow of creative capital into American business, the booklet predicts. The total need is \$580 billion in that time, which figures out as the equivalent of a \$14,000 investment for each family unit in the nation today.

"Between now and 1965, an estimated \$230 billion will be needed to replace worn-out or outmoded facilities. Another \$350 billion will be required to provide additional jobs and a rising living standard for the ever-increasing population," it says.

Pointing out that although much of this will come from retained corporate earnings and set-asides for depreciation, "The remainder must come largely from individual savings. But it will not flow freely unless earnings and dividends make investment attractive to the saver."

"Without this factor of more production for each hour a man works, and without the capital to make it possible, there is no progress—no rise in pay scales, no added leisure, no drop in prices or improvement in quality."

But no one wants to put up the capital unless there is a prospect of an attractive return, the booklet cautions.

Capital, it explains, means the tools of production; "savings alone, lying unused, mean nothing." With the many ways of investing in addition to stocks and bonds—such as savings accounts, real estate, savings and loan associations—many people do not realize the creative role their money plays.

Capitalism has confounded the pessimists of old by becoming the servant of man and building an economy of abundance. It has turned out such commonplace things as automobiles, television sets, and automatic furnaces which, as recently as 1900, "would have been only science fiction."

"The Manufacturers Record," published monthly by Manufacturers Record Publishing Co., 109 Market Place, Baltimore 3, Md. Entered as second class matter at Baltimore, Md., under the act of March 3, 1879. Volume 124, No. 6. Single Copies 35c. Back Numbers over three months old, 50c. Copyright June, 1955 by Manufacturers Record Publishing Co., all rights reserved.

"WHAT DOES IT TAKE
TO MAKE A RECORD
LIKE THIS?"



MORE



SOUTHERN

MANUFACTURERS RECORD FOR

THAN $1\frac{1}{3}$ MAJOR
Industrial Developments
along the Southern
each working day
for the past 10 years.

"A COMBINATION
OF ALL KINDS OF
ADVANTAGES FOR
INDUSTRY!"

RIGHT! You will find many different reasons behind the 353 major industrial developments that took place along our lines last year—and the 3,584 over the past ten years. Abundant natural resources. Plentiful manpower. Growing markets and other economic advantages.

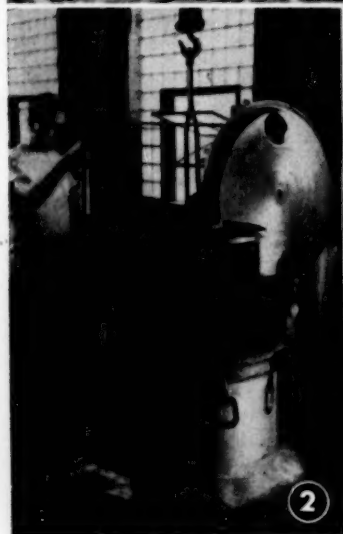
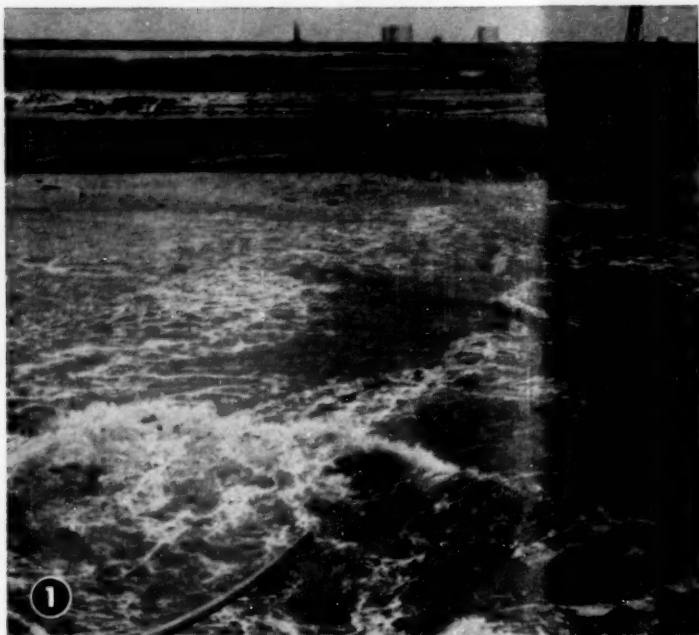
Modern rail transportation, too, belongs on the list. And that's the kind the Southern is geared to give.

We're growing with the growing South—with an ever-improving service for every shipper. Ship via Southern—and see!

RAILWAY SYSTEM



The South builds better with Steel



1 UNDERWATER POWER LINE. From this shore anchorage, four miles of strong USS Tiger Brand Amarine Cable—laid on the bottom of the Gulf of Mexico—carries power to off-shore oil-drilling rigs. This particular cable transmits 2500 horsepower and carries three pairs of telephone wires for rig-to-shore communication. There is a standard Tiger Brand cable for every special job . . . available through TCI.

2 LONG LIFE FOR DYEING. This dyeing equipment is cutting production costs for the Roanoke Mills Co., Roanoke Rapids, N. C., because it is made of Stainless Steel. Consequently, it is long lasting, requires practically no maintenance, is easy to clean. Stainless helps make a better product, too . . . its smooth, durable surface prevents snagging, no rust can stain fabrics. Stainless is being used extensively throughout Southern industries where conditions demand a material with superior strength, corrosion resistance, cleanliness and high temperature efficiency. The result is always big savings through reduced repairs and better end products.

3 TOPS IN ROOFING. A recent impartial survey of Southern farmers showed that USS Tennesseal V-Drain Roofing was the most popular galvanized steel roofing. In fact, of those surveyed, over 28% were present users of Tennesseal . . . 2½ times as many as all other brands combined! Why do so many more farmers want Tennesseal on their buildings? They know they'll get positive protection from rain, wind and fire, easy installation, long life with almost no upkeep—all at reasonable cost.

USS STEEL PRODUCTS MADE OR DISTRIBUTED BY T.C.I. INCLUDE:

- Rolled, forged and drawn steel products.
- Structural shapes, plates, bars, small shapes, agricultural shapes, tool steel, strip, floor plate, cotton ties.
- Tin mill products.
- Steel sheet piling and H-bearing piles, bridge flooring.
- Concrete reinforcing bars.
- Electric welded reinforcing fabric.
- Black, galvanized and special finish sheets.
- Rails, track accessories, wheels, axles, forgings.
- Wire and wire products, including woven wire fencing, barbed wire, bale ties, nails.
- Wire rope.
- Electrical wires and cables.
- USS High Strength Steels and USS Abrasion-Resisting Steels.
- USS Stainless Steel.
- Ground Open Hearth Basic Slag.

TENNESSEE COAL & IRON DIVISION

UNITED STATES STEEL CORPORATION, GENERAL OFFICES: FAIRFIELD, ALABAMA
DISTRICT OFFICES: CHARLOTTE · FAIRFIELD · HOUSTON · JACKSONVILLE · MEMPHIS · NEW ORLEANS · TULSA
UNITED STATES STEEL EXPORT COMPANY, NEW YORK



UNITED STATES STEEL

BUSINESS TRENDS

Boom Indications Reappearing

With continued economic expansion in April, it now appears that practically all ground lost in the 1954 recession has now been regained, with even the possibility that 1955 may set new output records before the year comes to an end.

The current upturn in business activity is now nearly a year old, having started in September of last year.

Furthermore, the base of the advance has now broadened out to such an extent as to take in almost all sectors of the National economy.

Agriculture Weak

The one conspicuous weak spot continues to be in Agriculture where per capita income of the farm population remains below the levels of previous years despite the fact that there are now a fewer number of farms and farm workers. In the meantime farm worker productivity has improved to such an extent that total physical farm output becomes somewhat greater each year.

Manufacturing Gains Greatly

Most outstanding of gains in any economic sector are those achieved by Manufacturing.

Output of factories is now equivalent to the highest point on record—that achieved in the midyear of 1953.

Unless there should come soon some impediment to the present trend, it does not seem at all unlikely that the total Manufacturing value turned out for 1955 will equal or even surpass that of the previous record-making 1953.

Durable Goods are far out in front in the matter of gains accomplished in the Manufacturing sector, and leading among these latter are, of course, Steel and Transportation Equipment. In the last named group, both Automobiles and Aircraft are contributing staunchly to the records now being set.

Possibilities of Decline

Among factors that could conceivably contribute to a leveling or decline in industrial averages within the near future are the possibilities strikes in the Automobile field, or a tapering off in production in this field due to top-heavy inventories or changeover for new models, and also the fact that Nondurable Goods are not participating in the current advance to the same extent as Durables.

This latter situation also serves to highlight another change that appears to be entering the picture. The greatest underlying strength now supporting economic activity seems to have swung from the Consumer segment over to the Investment segment.

Consumption & Investment Alternating

During the moderate recession of 1954, Consumer purchases bolstered by Consumer incomes remained high—

refusing to decline along with the industrial losses that occurred in nearly all economic sectors. That strength has persisted up to the present, but there now are some signs that this consumptive strength is beginning to taper off. This tendency is evidenced by slackening retail and service sales and also by the increasing proportion of Consumer purchases that is being made via credit.

On the other hand, Investment expenditure which receded slightly along with industrial developments now is responding to increased markets with enlarged plans for expansion and development.

Latest joint survey made by the Department of Commerce and Securities Exchange Commission indicates an increasing pace of new and expanding plant expenditures during the second and third quarters of this year. Business inventories also appear to be entering a period of expansion, having been liquidated during 1954 to what may now prove to be uncomfortably low levels.

Construction Still Soaring

Throughout the recent recession the strongest segment of business activity was centered in the Construction industry.

While there now appears to be some leveling of the hitherto rapid rate of increase in this industry, total values put in place are still at the highest point in all history, and contracts awarded for future erection assure continuation of this high level for a number of months to come.

While residential building, abetted by easy credit terms still is the chief motivating force in the maintenance of high Construction activity, there is lately being added an augmenting force based upon extensive industrial and commercial building.

Output Outstrips Employment

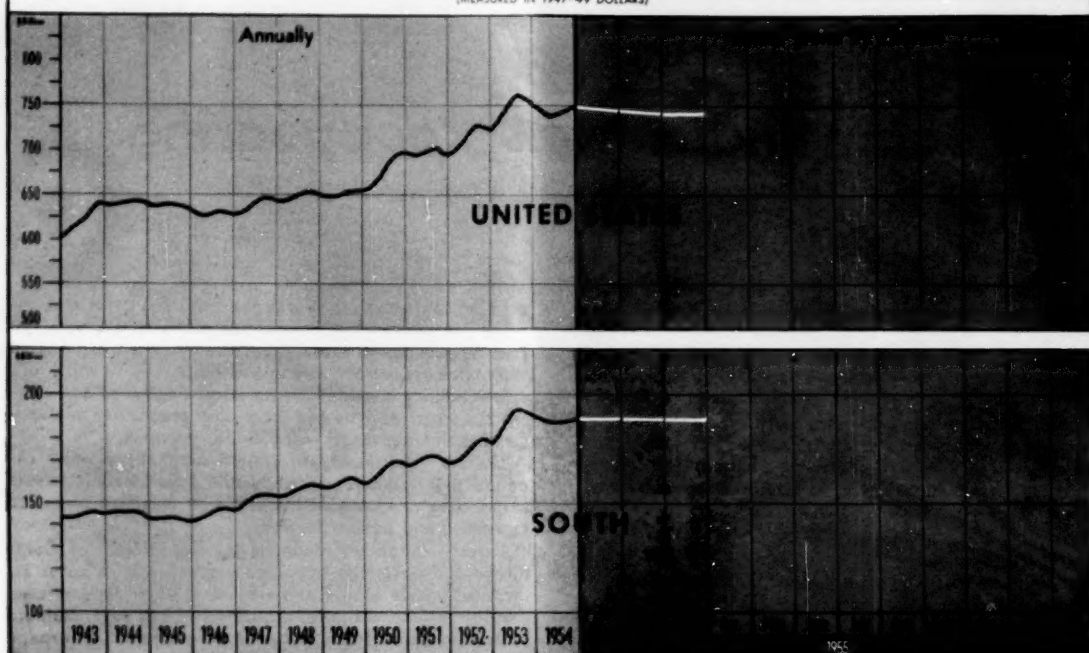
Gains in Output have not been matched with corresponding improvement in employment.

The employment situation has improved greatly, with total unemployment now under the three million mark and 500,000 lower than the year ago level but total nonagricultural employment is still 800,000 below the level of the same season in 1953.

This lag in rehiring as compared to productive output has been accompanied by an increase of working hours to 40.2 from 39.0 at the same period in 1954. The present level is just about the same as that of 1953, indicating clearly that fewer workers are now turning out more goods in the same period of time than was previously possible.

This lag in employment poses a problem for industry that can be met in any one of a number of ways, and if the present economic advance makes good its present promises correction of the employment situation undoubtedly will follow as a matter of good industrial management.

PHYSICAL VOLUME
OF
ALL GOODS AND SERVICES TURNED OUT BY PRIVATE ENTERPRISE
(MEASURED IN 1947-49 DOLLARS)



Regional Indicators

(Continued from page 9)

Farm Marketings (\$ Mil.)

	Mar. 1955	Feb. 1955	Mar. 1954
South	\$ 476	\$ 453	\$ 476
Other States	\$1,422	\$1,464	\$1,521
United States	\$1,898	\$1,917	\$1,992

Construction (\$ Mil.)

	Mar. 1955	Feb. 1955	Mar. 1954
South	\$ 996	\$ 896	\$ 868
Other States	\$ 925	\$1,746	\$1,687
United States	\$1,921	\$2,642	\$2,555

Mineral Output (\$ Mil.)

	Mar. 1955	Feb. 1955	Mar. 1954
South	\$ 557	\$ 555	\$ 549
Other States	\$ 454	\$ 442	\$ 452
United States	\$1,011	\$ 997	\$1,001

Manufacturing (\$ Mil.)

	Mar. 1955	Feb. 1955	Mar. 1954
South	\$ 4,850	\$ 4,852	\$ 4,643
Other States	\$16,783	\$16,647	\$16,288
United States	\$21,633	\$21,499	\$20,931

National Indicators

(Continued on page 12)

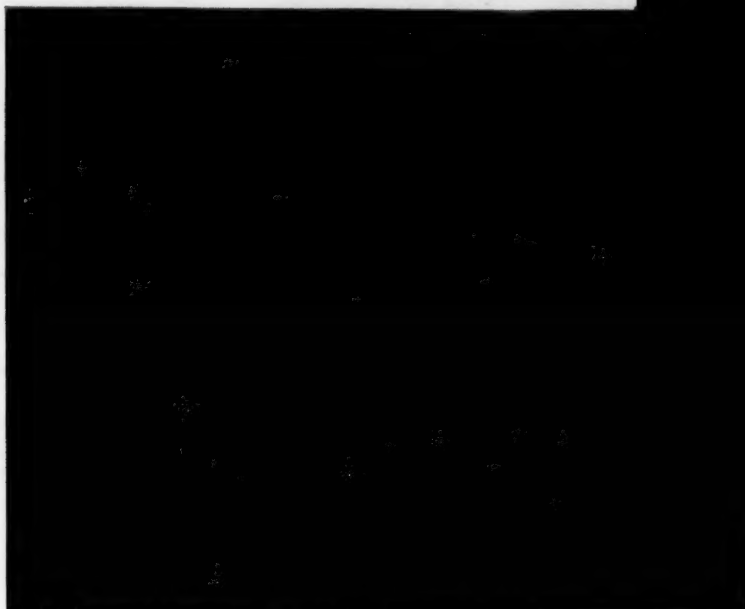
	Latest Month	Previous Month	Year Ago
Personal Income (\$ Bil.)	\$ 294.2	\$ 292.4	\$ 285.0
Ave. Weekly Earnings (Mfg.)	\$ 74.77	\$ 75.30	\$ 70.71
Consumer Credit (\$ Mil.)	\$ 29,948	\$ 29,518	\$ 27,833
New Mfg Orders	\$ 25,314	\$ 24,976	\$ 21,526
Mfg. Inventories (\$ Mil.)	\$ 43,472	\$ 43,477	\$ 45,150
Trade Inventories (\$ Mil.)	\$ 35,108	\$ 33,778	\$ 35,163
Bank Debits (\$ Mil.)	\$158,289	\$178,914	\$171,354

	Latest Month	Previous Month	Year Ago
Ave. Weekly Hours (Mfg.)	40.2	40.7	39.5
Carloadings	2,621	2,575	2,462
Consumer Prices ('47-'49=100)	114.3	114.3	114.8
Retail Prices ('35-'39=100)	207.5	207.5	208.3
Wholesale Prices ('47-'49=100)	110.5	110.0	110.5
Construction Costs ('47-'49=100)	123.6	123.4	121.2
Electric Output (mil. kw. hrs.)	51,153	46,269	45,166

Newport Steel

**EXPERIENCE, YOUTH, NEW FACILITIES
GIVE YOU
BETTER STEEL**

Basic ingredients of the best steel are experience and skill, modern facilities and youthful drive. At this mill 25% of the personnel have served 25 years or more. And young men devoted to the improvement of quality and service are increasingly attracted by Newport's many new facilities, the latest of which is a reversing cold mill. Combine these assets with freight-saving location in the area of greatest industrial growth, and you have a most logical source indeed for your steel requirements. Check this list of products, then check with Newport for what you need.



ECONOMICAL WATER/RAIL DELIVERY

Newport Steel is situated on the Mississippi-Ohio River system and the great Cincinnati rail hub. With the advantage of location, new river barge facilities and seven major railroads, Newport gives economical, dependable delivery to industrial areas throughout the Middle West and South.

PRODUCTS OF NEWPORT STEEL

- Cold-Rolled Sheets
- Hot-Rolled Steel in Coil
- Hot-Rolled Pickled Steel in Coil
- Hot-Rolled Sheets
- Hot-Rolled Pickled Sheets
- Galvanized Sheets
- Galvannealed Sheets
- Colorbond Sheets
- Electrical Sheets
- Alloy Sheets and Plates
- Electric Weld Line Pipe
- Roofing and Siding
- Eave Trough and Conductor Pipe
- Culverts

Newport Steel



CORPORATION

NEWPORT, KENTUCKY

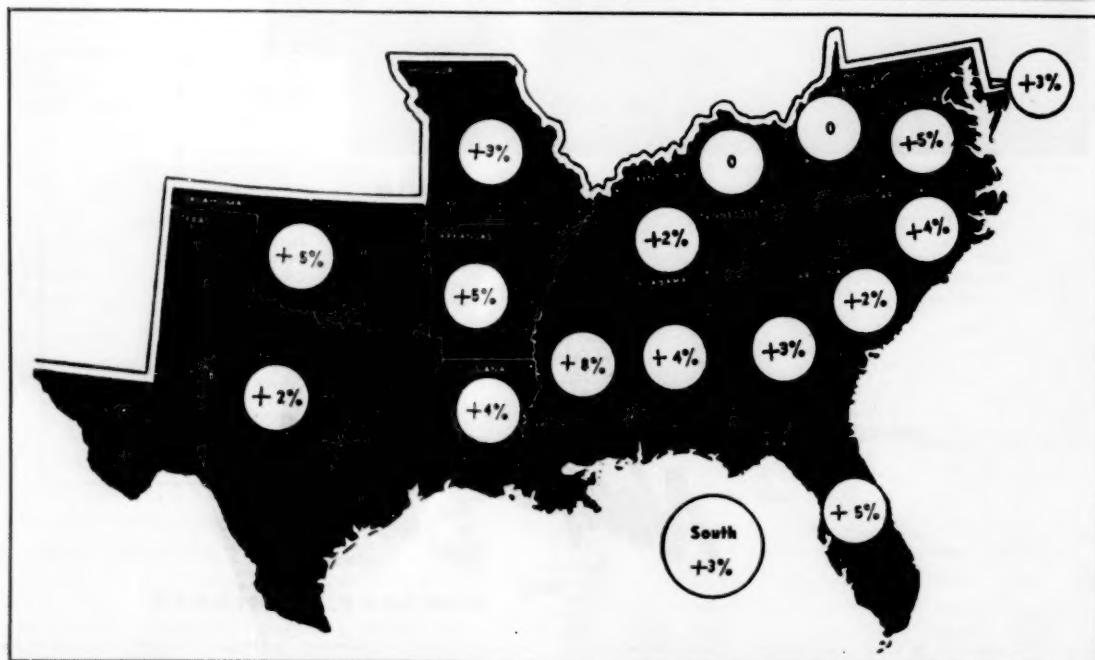
YOUR CONFIDENCE IS JUSTIFIED WHERE THIS FLAG FLIES

A SUBSIDIARY OF MERRITT-CHAPMAN & SCOTT CORPORATION

SOUTHERN BUSINESS VOLUME

Business Volume by States (\$ Million)
First 3 mos. of 1955 with gain (or loss) over first 3 mos. of 1954
(Continued from page 10)

	Farm- ing	Min- ing	Con- struc- tion	Manu- factur- ing	Utili- ties	Fi- nance	Whole- sale Trade	Re- tail Trade	Serv- ice Trade	Busi- ness Volume
Ala.	\$ 71 -10%	\$ 27 even	\$ 106 +23%	\$ 722 +1%	\$ 106 even	\$ 92 even	\$ 489 +3%	\$ 533 +11%	\$ 90 +6%	\$ 2,236 +4%
Ark.	108 -3%	30 +1%	62 +50%	237 +2%	63 even	36 even	240 +2%	323 +8%	45 even	1,144 +5%
D. C.	— —	— —	62 +29%	55 -3%	71 even	94 even	390 even	394 +12%	81 even	1,147 +5%
Fla.	186 +18%	21 even	278 +14%	391 +10%	173 even	176 +2%	786 -6%	1,028 +11%	168 +2%	3,207 +5%
Ga.	104 +4%	9 even	180 +30%	1,037 +5%	152 even	130 even	1,118 -3%	665 +10%	133 +2%	3,528 +3%
Ky.	168 -8%	88 -9%	125 -19%	785 +3%	124 even	72 even	615 -4%	605 +9%	87 +1%	2,669 even
La.	65 -8%	244 +11%	159 even	732 -2%	176 even	98 even	615 +15%	611 +12%	93 +3%	2,793 +4%
Md.	45 -3%	3 even	191 +13%	963 even	161 even	142 even	828 even	747 +14%	116 +5%	3,196 +3%
Miss.	95 -9%	28 -15%	58 +34%	270 +7%	57 even	37 even	304 +8%	329 +20%	51 +10%	1,229 +8%
Mo.	206 -7%	26 even	215 +30%	1,463 even	276 even	241 even	2,044 even	1,061 +11%	225 even	5,757 +3%
N. C.	85 -10%	6 even	156 even	1,676 +3%	146 even	116 +8%	1,014 +1%	795 +12%	123 even	4,117 +4%
Okla.	94 even	165 +5%	103 even	464 +3%	109 even	80 even	523 +3%	528 +13%	83 -5%	2,149 +5%
S. C.	38 -7%	3 even	120 even	711 +4%	57 even	51 even	316 even	443 +6%	57 even	1,796 +2%
Tenn.	107 -7%	15 even	186 +12%	854 +1%	128 even	114 even	1,096 even	684 +10%	126 +2%	3,310 +2%
Tex.	350 -9%	816 +1%	555 +9%	2,601 +1%	490 even	395 even	2,490 even	2,248 +9%	388 even	10,333 +2%
Va.	91 -4%	24 -2%	197 +26%	1,072 +2%	179 even	141 even	649 +9%	744 +10%	125 +5%	3,222 +5%
W. Va.	30 -10%	150 even	52 even	417 even	107 even	45 even	247 -2%	351 +6%	55 even	1,454 even
South	1,843 -5%	1,655 even	2,805 +11%	14,450 +1%	2,575 even	2,060 even	13,764 even	12,089 +11%	2,046 +1%	53,287 +3%

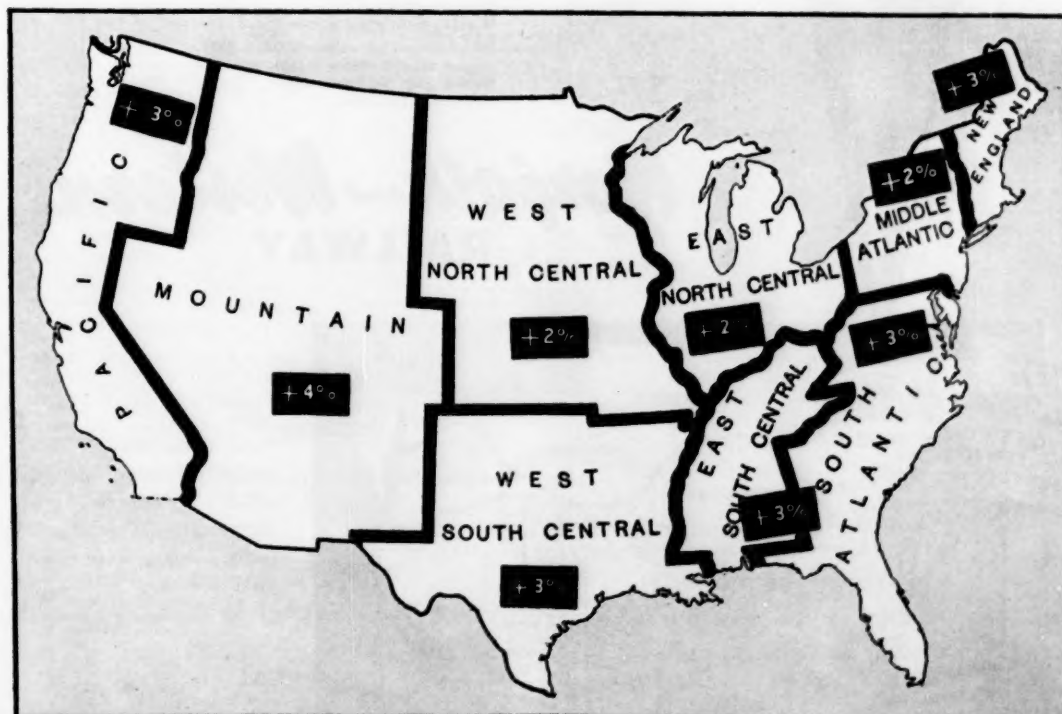


NATIONAL BUSINESS VOLUME

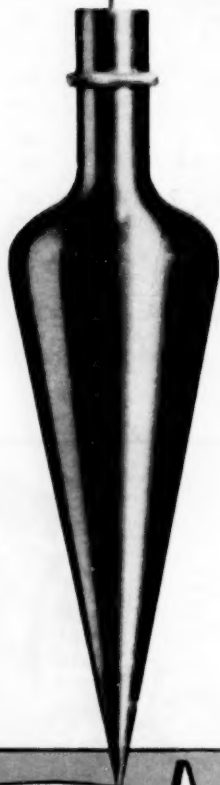
Business Volume by Regions (\$ Million)

First 3 mos. of 1955 with gain (or loss) over first 3 mos. of 1954

	Farm- ing	Min- ing	Con- struc- tion	Manu- factur- ing	Utili- ties	Fi- nance	Whole- sale Trade	Re- tail Trade	Serv- ice Trade	Busi- ness Volume
New Eng.	\$ 201 even	\$ 14 even	\$ 460 +20%	\$ 4,438 even	\$ 472 even	\$ 633 even	\$ 2,422 even	\$ 2,792 +11%	\$ 481 +3%	\$11,913 +3%
Mid. Atl.	452 even	205 -20%	1,650 +19%	14,960 even	2,085 -2%	2,431 even	16,226 even	8,163 +11%	2,263 +1%	48,435 +2%
E. N. Cen.	1,408 -2%	218 even	1,627 +14%	19,727 +1%	1,838 even	1,652 +3%	12,532 even	8,968 +11%	1,815 +1%	49,785 +2%
W. N. Cen.	1,927 -3%	236 -5%	679 +23%	4,758 even	861 even	698 even	6,122 even	3,874 +12%	640 +1%	19,795 +2%
S. Atl.	598 even	216 -14%	1,271 +13%	6,492 +3%	1,069 even	916 even	5,457 even	5,284 +11%	876 +2%	22,179 +3%
E. S. Cen.	441 -8%	158 -7%	475 +2%	2,631 +2%	415 even	315 even	2,504 even	2,151 +11%	354 +5%	9,444 +3%
W. S. Cen.	617 -6%	1,255 +4%	679 +7%	4,034 even	838 even	609 even	3,868 +3%	3,710 +11%	609 even	16,419 +3%
Mount.	426 -5%	379 +2%	303 +11%	1,011 +6%	355 even	215 even	1,338 +4%	1,427 +11%	245 +1%	5,699 +5%
Pacif.	657 -2%	316 even	1,002 +10%	6,111 +3%	970 even	996 +3%	5,043 even	4,389 +11%	1,074 +1%	20,458 +4%
U. S.	6,727 -3%	2,997 even	8,346 +14%	64,162 +1%	8,903 even	8,365 +1%	55,512 even	40,758 +11%	8,357 +1%	204,127 +3%



There's an exact spot for you in the *Land of Plenty*



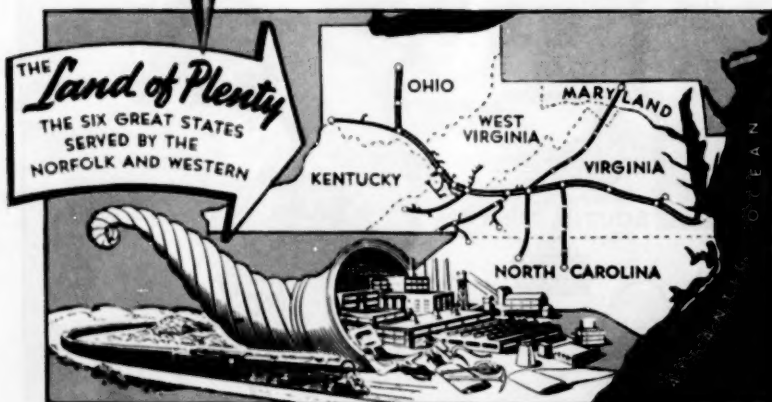
Somewhere in the area shown on the map below there is a plant site that may be ideally suited for your operation — with plenty of room to grow near the materials, markets, manpower and Precision Transportation you require.

Industries of all types — manufacturing, processing, assembling, warehousing — have made profitable locations here. The reason is simple: In this rich, uncrowded Land of Plenty it's easier to find what you need.

Send an outline of your requirements to the Norfolk and Western's plant location specialists for facts, figures and specific recommendations to benefit *your* operation. Your inquiry will be handled in confidence and without obligation. No representative will call unless you request further assistance.

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NEW AND EXPANDING PLANTS

COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

ALABAMA

ANDALUSIA—Southeast Alabama Natural Gas Co. plans office building and warehouse. S. B. Echols, Birmingham, Archt.

BIRMINGHAM — Breneman-Hartshorn, Inc., let contract to Martin Clem, Birmingham, for factory and office building, 1st Ave. and 8th St., N. Lawrence S. Whitten, Archt.

BIRMINGHAM — Gordon's Trans., Inc., Memphis, Tenn., 781 S. Main St., received bids for motor freight terminal at 1507 26th St., N. Greer, Holmquist & Chambers, Birmingham, Archts.

HUNTSVILLE—The Huntsville Times received bid for newspaper building at \$342-662 from Brice Building Co., Birmingham. Warren Knight & Davis, Birmingham, Archts.

MARSHALL CO.—Pat M. Courington, Albertville, Ala., let contract to H & H Constr. Co., Albertville, at \$74,474 for radio and press building. Frank Y. Peteet, Gadsden, Ala., Archt.

MOBILE—Stauffer Chemical Co., 420 Lexington Ave., New York, plan carbon bisulfide producing plant, to cost several million dollars.

TALLADEGA — Bachman-Uxbridge Worsteds Corp. plans expansion program, including garment plant addition.

ARKANSAS

LITTLE ROCK — American Machine & Foundry Co., New York, plan \$1,250,000 plant to manufacture bicycles.

WEST MEMPHIS—Ebasco Services, Inc., consultant engineer for Atomic Energy Commission, let contract to J. A. Jones Construction Co., Charlotte, N. C., at \$107,000,000 for Dixon-Yates power generating plant.

GEORGIA

ATLANTA—Grinnell Co. received bids for office building and warehouse. Stevens & Wilkinson, 157 Luckie St., N.W., Atlanta, Archts.

CHAMBLEE—Allied Van Lines Terminal Co. received bids for office and terminal building. Ayers & Godwin, 211 Bona Allen Bldg., Atlanta, Archts.

COLUMBUS—Marimar Corp. received bids for recreation center. E. Oren Smith, 1236 Wildwood Ave., Archt.

DUBLIN—J. P. Stevens & Co., Inc., Millersville, Ga., received bids for Dublin Plant No. 2. Robert & Co. Assocs., 96 Poplar St., N.W., Atlanta, Archts-Engrs.

ROME—Rome Hardware Co. received bid from Bradford Flooring Co., N. Fifth Ave., at \$111,249 for new plant. Glass-Montgomery-Turner & Assocs., 402 E. Second Ave., Archts.

KENTUCKY

CALVERT CITY—American Aniline & Extract Co., Philadelphia, Pa., plan a polyvinyl alcohol plant.

LOUISVILLE — B. F. Goodrich Chemical Co., John R. Hoover, president, plans \$2-500,000 expansion program, doubling production of synthetic rubber and latex.

LOUISIANA

BARTLESVILLE—Phillips Petroleum Co. plans chemical research laboratory, to cost several million dollars.

HARVEY—Walter Cook Keenan, Jr., 351 Audubon St., New Orleans, Archt., to receive bids for frame and metal addition to industrial building, and renovations and remodeling.

LAFAVETTE—Massart Tire & Supply Co., 211 W. 3rd St., received bid from Weill Lumber Co., Abbeville, La., at \$35,480 for brick and steel alterations and additions. W. F. Bowen, Archt., and D. J. O'Rourke & Eugenia Morse, Assocs., 314 S. Buchanan St., Lafayette.

LOCKPORT—Valentine Pulp & Paper Co. plans a 50 per cent expansion of papermaking plant.

NEW ORLEANS—Andrew Louis Schneider, Pere Marquette Bldg., Archt., stated contract was let to Haase Constr. Co., Inc., 424 S. Anthony St., at \$106,932 for office and warehouse building on Leonidas St.

RUSTON—City received bids for industrial plant building. Rivers & Heuer, 513 Ouachita National Bank Bldg., Monroe, La., Archts. \$350,000 bond issue voted.

MARYLAND

BALTIMORE — Allied Research Products Corp. let contract to Luther E. Gerwig, 2127 Dukeland St., at \$25,000 for building addition, 4004-4006 E. Monument St.

BALTIMORE—C & P Telephone Co., Lexington Bldg., let contract to Baltimore Contractors, Inc., 711 S. Central Ave., for accounting center, 4904 Harford Road. James R. Edmunds, Jr., 1025 St. Paul St., Archt.

BALTIMORE — The Elite Laundry received bid from Colwill Constr. Co., Inc., 2114 Maryland Ave., Baltimore 18, for alterations and additions, 1920 Clifton Ave. Jamison & Mareks, 8 E. Mulberry St., Balto., 2, Archt.

BALTIMORE—Gunther Brewing Co., 1211 S. Conkling St., Baltimore 24, let contract to Consolidated Engr. Co., Inc., 20 E. Franklin St., Baltimore 2, at \$10,000 for warehouse and bottling plant and conveyor bridges. Harley, Edgington & Day, 153 E. Elizabeth St., Detroit 1, Mich., Archts.

BALTIMORE CO. — Transport Mfg. & Equipment Co., Kansas City, Mo., received bids for freight terminal building on Sulphur Spring Road.

BALTIMORE—Western Maryland Railway Co., Standard Oil Bldg., let contract to James

New and Expanding Plants

Reported in May 1955

91

First Five Months of 1955

509

First Five Months of 1954

568

Stewart Co., Inc., 230 Park Ave., N. Y., at \$943,000 for grain elevator at Port Covington.

CUMBERLAND — Pittsburgh Plate Glass Co., 1 Gateway Center, Pittsburgh, Pa., received bids for manufacturing plant.

CURTIS BAY—Davison Chemical Co. Division of W. R. Grace & Co. to construct plant to produce petroleum cracking catalysts.

FRIENDSHIP AIRPORT — Westinghouse Electric Corp., Pittsburgh, Pa., received bid for hangar for Air Division; and grading for electronics plant.

GLEN BURNIE—C & P Telephone Co., Lexington Bldg., Baltimore, Md., let contract to E. Eyering & Sons Co., 808 S. Conkling St., for Glen Burnie Center. Taylor & Fisher, 1012 N. Calvert St., Archt.

HAWKINS POINT—The Glidden Co. received bids for industrial plant.

MIDDLE RIVER—Glenn L. Martin Co. let contract to Wm. T. Lyons Co., Inc., 1700 Friendship St., Baltimore 18, at \$41,718 for addition to electric test building.

TOWSON—Bendix Radio Division received bids for engineering building.

MISSISSIPPI

AMORY — Gilmore Puckett Lumber Co., Amory, plan insulated metal type building to be leased to Pullman Couch Co. of Mississippi.

BATESVILLE—City received bids for addition to Batesville Co.'s plant. Pritchard & Nickles, Tunica, Miss., Archt-Engrs.

CANTON—City let contract to Priestner Constr. Co., Box 4456, Jackson, at \$91,900 for factory building on Frey Lane for Sclar Furniture Corp. Jay T. Liddle, 404 Barnett-Madden Bldg., Jackson, Archt.

CLARKSDALE—City let contract to G. E. Bass & Co., Jackson, at \$1,113,855 for manufacturing plant to be leased to American Hardware Corp., New Britain, Conn. R. W. Naef, Jackson, Archt.

CORINTH—City let contract to A. C. Samford, Inc., Box 1229, Albany, Ga., at \$489,083 for modern plant and office at Corinth for Wuriltzer Plano Co. John L. Turner & Assocs., 1060 Milner Bldg., Jackson, Miss., Archts.

DECATUR—Board of Supervisors of Newton County received bid from B. L. Knott, Box 267, Meridian, Miss., at \$81,613 for construction of Decatur Shirt Co. Building, for Beat 1, Newton County; and to be occupied by Imperial Shirt Co. of New York. Walker Refrigeration Service, 1815 15th St., Meridian, Miss., was low on plumbing, heating and air conditioning, at \$45,563. City Electric Shop, 884 S. 13th Ave., Laurel, Miss., was low on electrical work at \$18,637. Fell Automatic Sprinkler Service, Inc., 711 Wilmington St., Jackson, Miss., was low on Sprinkler System at \$12,707. R. D. Cole Mfg. Co., Newnan, Ga., was low on Steel Elevated Storage Tank, at \$22,330. Robert B. Clopton, Roebuck Dr., Meridian, Miss., Archt.

HOLLY SPRING—City received bids for addition for Coated Abrasive plant.

IUKA—Board of Supervisors of Tishomingo County received bid from Kimberly Bros. Constr. Co., Iuka, at \$277,579 for manufacturing plant for General Shoe Corp. John Charles Wheeler, 501 Chamber of Commerce Bldg., Nashville, Tenn., Archt. B. A. England, Jr., 616½ Fillmore St., Corinth, Miss., Assoc. Archt.

LAUREL — Norris Dispensers, Inc., East 13th St., received bid from Dan R. Hall, Box 425, for addition to plant, at \$96,900. Robt. B. Clopton, Box 149, Meridian, Miss., Archt.

YAZOO CO.—Board of Supervisors let contract to Lancaster Bros. Constr. Co., Box 3737, Greenville, Miss., for sawing plant. Walk C. Jones, Jr., Archt.

MISSOURI

ST. LOUIS — Chase Brass & Copper Co., Louis J. Vogler, Manager, 3815 Market St., plan warehouse and office. North side McRee Ave., east of Kingshighway. Rathmann, Koelke & Carroll, 316 N. 8th St., Archts.

ST. LOUIS—Sterling Aluminum Products, Inc., 2925 N. Market St., plans factory and office building; contract let to Fruin-Colnon Contracting Co., 1706 Olive St.

ST. LOUIS—U. S. Plywood Corp., 4268 Utah St., received bid from Ray M. Dilschneider, Inc., 8600 Manchester Road, Brentwood, for warehouse at Morganford & Utah. Froese, Manck & Becker, 705 Olive St., Archt.

ST. LOUIS COUNTY — Rexall Drug Co., 3915 N. Kingshighway, St. Louis, plan new warehouse; also expanding manufacturing plant facilities in St. Louis. Total cost, \$1-465,000, according to James Knowles, Jr., Vice-pres.

NORTH CAROLINA

ACHE—Riegall Carolina Corp. C. E. Hartford, Plant Manager, plans \$6,000,000 plant expansion. Subsidiary of Riegall Paper Corp., New York.

ALBEMARLE (nr.)—Collins & Aikman, 200 Madison Ave., New York, plan \$2,500,000 textile dyeing and finishing plant.

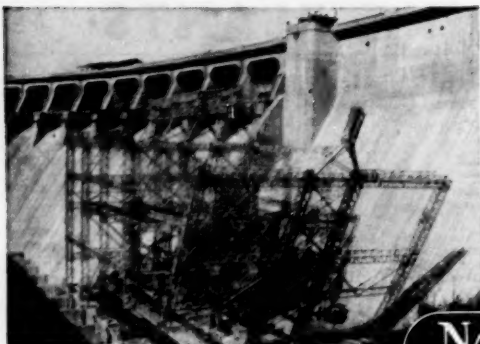
(Continued on next page)

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NASHVILLE, TENN. — BESSEMER, ALA.



NEW AND EXPANDING PLANTS

(Continued from page 15)

FAYETTEVILLE—American Bakeries Co., Atlanta, Ga., let contract to Southern Builders, Inc., Fayetteville, for additions and alterations to plant. Stevens & Wilkinson, Atlanta, Archts.-Engrs.

GASTONIA—Burlington Mill Corp., Greensboro, N. C., received bid from Fiske-Carter Constr. Co., Spartanburg, S. C., for additions and alterations to Burlington Flint Plant No. 1.

GREENSBORO—First Fidelity Co. received bid from W. H. Weaver Constr. Co., at \$72,883 for IBM office building. Chas. C. Hartmann, Archt.

HENDERSONVILLE—General Electric Co. at Hendersonville, let contract to H. L. Coble Construction Co., Greensboro, N. C., for outdoor lighting plant. J. E. Sirrine Co., Greenville, S. C., Archts.-Engrs.

HICKORY—General Electric Co. let contract to J. A. Jones Construction Co., Charlotte, for distribution transformer plant.

SMITHFIELD—Jerald Corp. received bids for cutting and sewing plant.

SWANANOA—Draper Corp. let contract to Fiske-Carter Constr. Co., Spartanburg, S. C., for shuttle plant. Lockwood-Greene Engrs., Inc., Spartanburg, Archts.-Engrs.

WASHINGTON—N. C. Television, Inc., received bid of \$73,660 from Rwen-Wilson Construction Co., Durham, for TV station. J. Scott Thomas, Rocky Mount, Archt.

WINSTON-SALEM—Oldtown Telephone System, Inc., Rt. 1, received bids for building, REA Proj. NC 502. Stinson & Archt., Archts.

OKLAHOMA

PONCA CITY—Continental Oil Co. plans expansion of refinery to include a dairy wax plant.

SOUTH CAROLINA

BARNWELL—Amerotron Corp. of Textron American, Inc., let contract to Daniel Constr. Co., Greenville, S. C., for woolen plant.

CHESTER—Borden Food Products Co., New York, received bid from Potter-Shackel-

ford Constr. Co., Greenville, S. C., at \$61,450 for warehouse.

GREENVILLE—Woodside Mills let contract to Daniel Constr. Co., Spartanburg, S. C., for warehouse, to be erected along track of Piedmont & Northern Railway; estimated cost \$400,000. Lockwood-Greene Engineers, Inc., 41 E. 42nd St., New York 17, Archts.-Engrs.

IRMO—General Electric Co., Schenectady, N. Y., plan \$6,400,000 plant to manufacture parts for radio and television receivers.

TENNESSEE

CHATTANOOGA—Great Southern Truck Co., Jacksonville, Fla., let contract to Brice Bldg. Co., Birmingham, at \$123,377 for truck terminal and office. Greer, Holmquist & Chambers, Birmingham, Archts.

CHATTANOOGA—Mills & Lupton Supply Co., 1152 Market St., plan new building on East 12th St., Shepherd & Smith, James Bldg., Archts.

CLEVELAND—Peerless Woolen Mills plans expansion program to cost between \$2,500,000 and \$4,000,000.

MORRISTOWN—American Enka Corp., Enka, N. C., plans rayon staple fibre production unit. To cost about \$20,000,000 according to John E. Bassill, president.

TEXAS

AMARILLO—Neil & John Yows, Amarillo, received bid of \$76,632 from Page & Richardson, Box 1004, for truck terminal. Clayton B. Shiver & Russell Megert, 1011 Fisk Bldg., Archts.

ANDREWS COUNTY—Phillips Petroleum Co. plan natural gas liquid extraction plant in Andrews County.

ARLINGTON—American Can Co., 100 Park Ave., New York, plan container-making plant.

AUSTIN—Austin Industries plan factory on 8-acre tract to manufacture modern furniture.

AUSTIN—Austin Metal & Iron Co. received bid from J. C. Evans Constr. Co., Inc., Box 4034, at \$48,411 for administration building

and warehouse. Lundgren & Maurer, 1007 W. 24th St., Archts.

AUSTIN—Lone Star Sales Co., 2001 E. 5th St., let contract to J. H. McCullick, 1010 Brazos St., at \$44,670 for warehouse. Doyle M. Baldrige, 2408 Exposition Blvd., Archt.

AUSTIN—Southwestern Bell Telephone Co. plans \$4,000,000 expansion program.

BARTLESVILLE—Phillips Petroleum Co., Phillips Research Center, Bartlesville, plans chemical research laboratory.

BRUNI—Southwestern Bell Telephone Co. plans commercial dial building.

DALLAS—Firestone Tire & Rubber Co., 502 Exposition St., received bids for office and warehouse. Harry Hines & Shorecrest Road.

DALLAS—Frozen-Rite Products, 1709 Forest St., let contract to Schwarz Co., 1608 Browder St., at \$95,443, for building in 1900 block Good Latimer St. Erwin & Willimon, 2713 Canton St., Archts.

DALLAS—Lane Container Co., 10212 Denton St., received bid from Charles V. Sumner, 3408 Rankin St., at \$48,020 for addition to warehouse. Lane, Gamble & Assoc., 6030 Hines Blvd., Archts.

DALLAS—Texas Utilities Co. plans expenditure of \$57,000,000 in 1953—and about \$60,000,000 in each of next three years—for electric power facilities.

DALLAS—U. S. Plywood Corp., Div. Headquarters, 2825 Manor St., plans warehouse on Denton Drive.

ELGIN—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, let contract to Frank R. Rundell Co., 309 Bowie St., Austin, for dial building. E. 2nd St.

FORT WORTH—Rowan Oil Co., Fair Bldg., plans 2-story office building, to cost \$350,000. J. H. Williams & Co., 1407 S. Akard St., Dallas, Archts.

GARLAND—Temco Aircraft Corp., 1625 I St., N.W., Washington, D. C., plan \$500,000 addition to plant.

HOUSTON—Grocers Supply Co., Inc., let contract to Candoo Constr. Co., Inc., 7311 Alameda St., at \$1,000,000 for office and warehouse building on 17-acre tract. Holcombe

(Continued on page 61)

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Left: Carol City Sewage Treatment Plant. Left rear is the 150,000-gal. Horton Watersphere.

LITTLE GRAINS OF SAND

*"Little drops of water, little grains of sand,
Make the mighty ocean, and the pleasant land."*

Unfair and Illegal. Secondary boycotts pop up in numerous situations. One of the most common is to help organize a company's workmen who do not want to be organized. If the employees won't join the union, the business agent asks the employer to make them join. If the employer refuses to interfere, the union may picket the firms who do business with the employer; thus a third party is involved and it becomes a secondary boycott.

Another vehicle for this unfair labor practice is to achieve a restraint of trade by seeing that "local" union men get the work, instead of having the product made out-of-state. Or the secondary boycott may be used to establish featherbedding, to keep prices up, to take goods off the market, or to prevent subcontracts to a low bidder. Another tragic example is the union label secondary boycott. In this situation the employer may even employ union workmen, but union workmen of other employers will refuse to work on or install the company's product because it lacks a union label. The lack of a label, they say, is "unfair."

The use of this weapon is not limited to manufacturers. It is used against all business. Retailers, wholesalers, and distributors — all are numbered among its victims.

National Debt. Why haven't we reduced the debt drastically during the period of high prosperity since the big war? There are several reasons. Politically, it has been more appealing to reduce taxes. Politically, also, we haven't been active enough in reducing federal spending.

In the field of economics we encounter a second major roadblock. Just as increasing the debt is inflationary, rapid decrease in the debt is deflationary. During prosperous periods we haven't the courage to apply the brakes, in periods of readjustment or depression we don't dare.

Only a sound program of debt reduction, backed by

political courage and vehement public demand, can lessen the burden we are passing to future generations.

Corporate Giving. Corporations, in their expanding role of industrial citizens, are rising to meet their expanding responsibilities to society through generous grants to institutions of higher learning and to many other worthy causes. This sense of obligation is an important motivation but is certainly not the only one for such grants. Neither does it suffice to point to tax provisions as the over-riding stimulus to corporate philanthropy. The Council for Financial Aid to Education in a recent study concluded, "There has been no obvious connection with existence or non-existence of excess profits taxes (and corporate contributions)." Certainly, these gifts are not a result of pressure tactics of "organized do-gooders" as has been implied.

What then is the prime motivation for corporate managers to commit a portion of their company's funds to philanthropy? It is because those who control the bulk of our nation's wealth know that the continued existence of educational and charitable institutions free of governmental control is essential to the maintenance of the economic climate of a God-fearing country.

A business firm expands by offering customers more than its competitors. The possibilities for growth are in direct proportion to the service it renders. But a government bureau expands by the transfer of power from individuals and voluntary groups to itself. Its growth becomes destructive of initiative and freedom.

Thurman Sensing Says:

We have lost our liberty as individuals by magnifying the powers of the State. The last forty years have seen an almost complete reversal of the

old English tradition of freedom—both in Britain and in the United States. Our history as a people has been the history of revolts against the too great concentration of power in the hands of any individual, institution, or class of society. But the last forty years, beginning with the income tax, have seen power concentrated to a degree hitherto unknown in our own history in the hands of the State.

The process has been gradual and insidious. It has
(Continued on page 20)



Safety-Beam Protection at "Million Yard Fill"

Pushing the recently completed West Virginia Turnpike through the rugged foothills of the Alleghenies has been called "the toughest road job east of the Rockies." Winding mountain streams, canyons and sharply pitched hills were hardly an ideal terrain for roadbuilding.

To build the new highway with grades generally less than 3 pct and with curves limited to a minimum radius of 1000 ft required tremendous excavating, grading and filling operations. More than 70 bridges were built to carry the 88-mile-long turn-

pike over the mountainous terrain.

Near Beckley, W. Va., is the "million yard fill," a good example of how the terrain was "rebuilt" to conform to the highway's specifications. Here, as at many other points on the West Virginia Turnpike, Bethlehem Safety-Beam Guard Rail was installed to help protect motorists. These sturdy sections of steel plate were bolted flush end-to-end to steel posts, making a continuous beam of impact-absorbing rail.

Bethlehem Safety-Beam Guard Rail is a strong and effective highway

guard, with sufficient strength to withstand severe shocks from colliding vehicles, yet enough flexibility to redirect the vehicle parallel to the rail with minimum damage to both rail and vehicle.

Write to the nearest Bethlehem office for a copy of our new Safety-Beam Guard Rail catalog which gives full details and specifications.

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NORFOLK

LITTLE GRAINS OF SAND

(Continued from page 18)

been accomplished in the main as the result of looking to the State for the solution of all human problems. If wages were low, for instance, let the State impose a Minimum Wage law. If there was unemployment, let the State provide "Full Employment or Compensation." If there was old age, let the State make provision for it. And so on. . . .

It is not to be denied, of course, that a strong case could be made out for each of these things. But in the rush to make the State responsible for guarding the citizen against all the risks and emergencies of life, two things were forgotten.

The first is that the State, of itself, produces nothing. Whatever it appeared to "give" to the citizen in one form, it had first to take from him in another. The second is that whenever the State "gives" an apparent benefit, it takes away a real liberty.

A Practical Guarantee. If the labor leaders really desire to secure for their members year round pay, they should insist that every concern in every industry tie wages to the value which the enterprise in question is currently creating. The experience of the Nunn-Bush Shoe Company and more than a thousand French concerns shows that, with wage rates thus made flexible, it is practicable to secure for most workers continuous employment yielding incomes which, while fluctuating somewhat from month to month in terms of money, have reasonably steady purchasing power. No other plan has yet been evolved which, in a competitive economy, gives any promise of even approximating this highly desirable result.

Strength from Below. A study of school conditions in the various states shows that the discrepancies and inequalities are far greater within states than among states. They exist because of the failure of some state legislatures to enact fair and adequate equalization programs. If those states do not use their own funds to the best advantage to ameliorate the wide discrepancies between school needs and economic capacity among their various communities, then there is no reason to believe that Federal funds would be allocated more wisely under state control. That is why the point has been made that Federal aid distributed under state control would not eliminate local deficiencies or provide a more equalized education opportunity throughout the country.

The strength of American education comes from below and not from above. It comes from the parents and from the communities and not from Washington. The American people have built up over the past century and a half the greatest school system in the world under state and local responsibility.

Socialistic Demonstration. Socialism has demonstrated four facts over and over again:

1. You can't multiply wealth by dividing it.

(Continued on page 22)

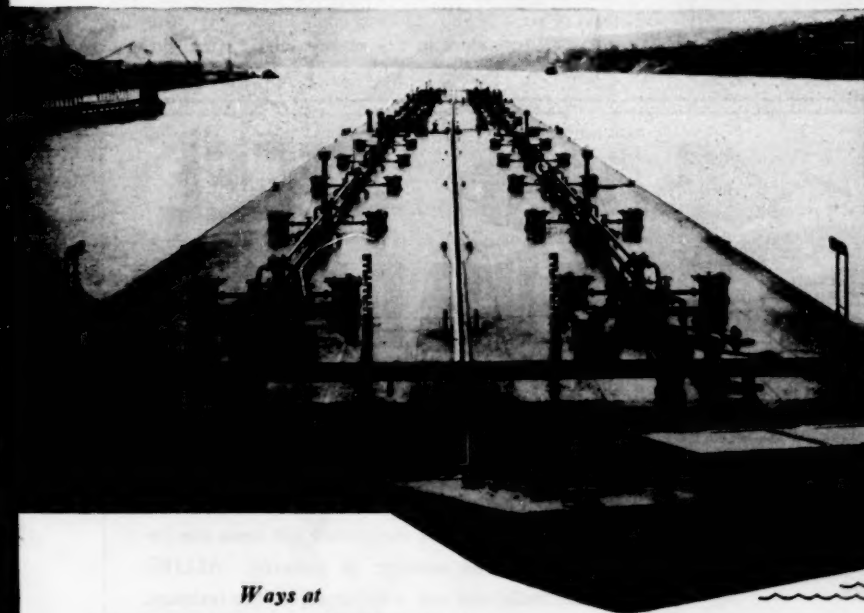


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AMERICAN BRIDGE



UNITED STATES STEEL

LITTLE GRAINS OF SAND

(Continued from page 20)

2. It does no good to get rid of a few little monopolies by creating a big one called "government."

3. The government can't give what it does not first take away.

4. It can never take away enough to supply the ever increasing demands of those who are led to believe they are getting something for nothing when they get it from Uncle Sam.

—KENNETH W. SOLLITT

No Monetary Value. Bureaucratic management is the method applied in the conduct of administrative affairs the result of which has no cash value on the market. We do not say that a successful handling of public affairs has no value, but that it has no price on the market, that its value cannot be realized in a market transaction and consequently cannot be expressed in terms of money.

It is vain to advocate a bureaucratic reform through the appointment of businessmen as heads of various departments. A former entrepreneur who is given charge of a government bureau is in this capacity no longer a businessman but a bureaucrat. His objective can no longer be profit, but compliance with the rules and regulations. As head of a bureau, he may have the power to alter some minor rules and some matters of internal procedure. But the setting of the bureau's activities is determined by rules and regulations which are beyond his reach.

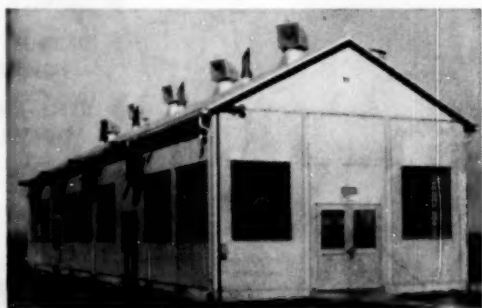
Those who criticize bureaucracy make the mistake of directing their attacks against a symptom only and not against the seat of the evil. Bureaucracy in itself is neither good nor bad. What many people nowadays consider an evil is not bureaucracy as such, but the expansion of the sphere in which bureaucratic management is applied—a substitution of bureaucratic management for profit management.

Unworkable. The fair trade laws aren't working because they are intruders in the market place. For the same reason we doubt if an attempt to control loss leaders will work, either. And the difficulties that come to mind in administration of any such law are almost countless.

Who is to determine whether the sale of some shirts at a loss is a loss leader sale or based on the sound economic principle of clearing the shelves of goods that aren't moving at a higher price?

Both these proposals for price controls overlook the principles of the free market which ought to be that a housewife has a right to buy her bread wherever she can get it at lowest cost and that the merchant ought to have the right to give that bread away if he wishes.

But the purpose behind fair trade and against loss leaders goes in the exact opposite direction. The purpose of such laws is to keep costs high. There they are not only intruders in the market place but pickers of the public's pockets.



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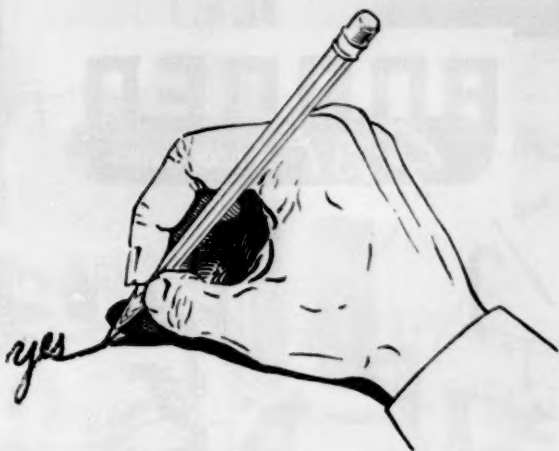
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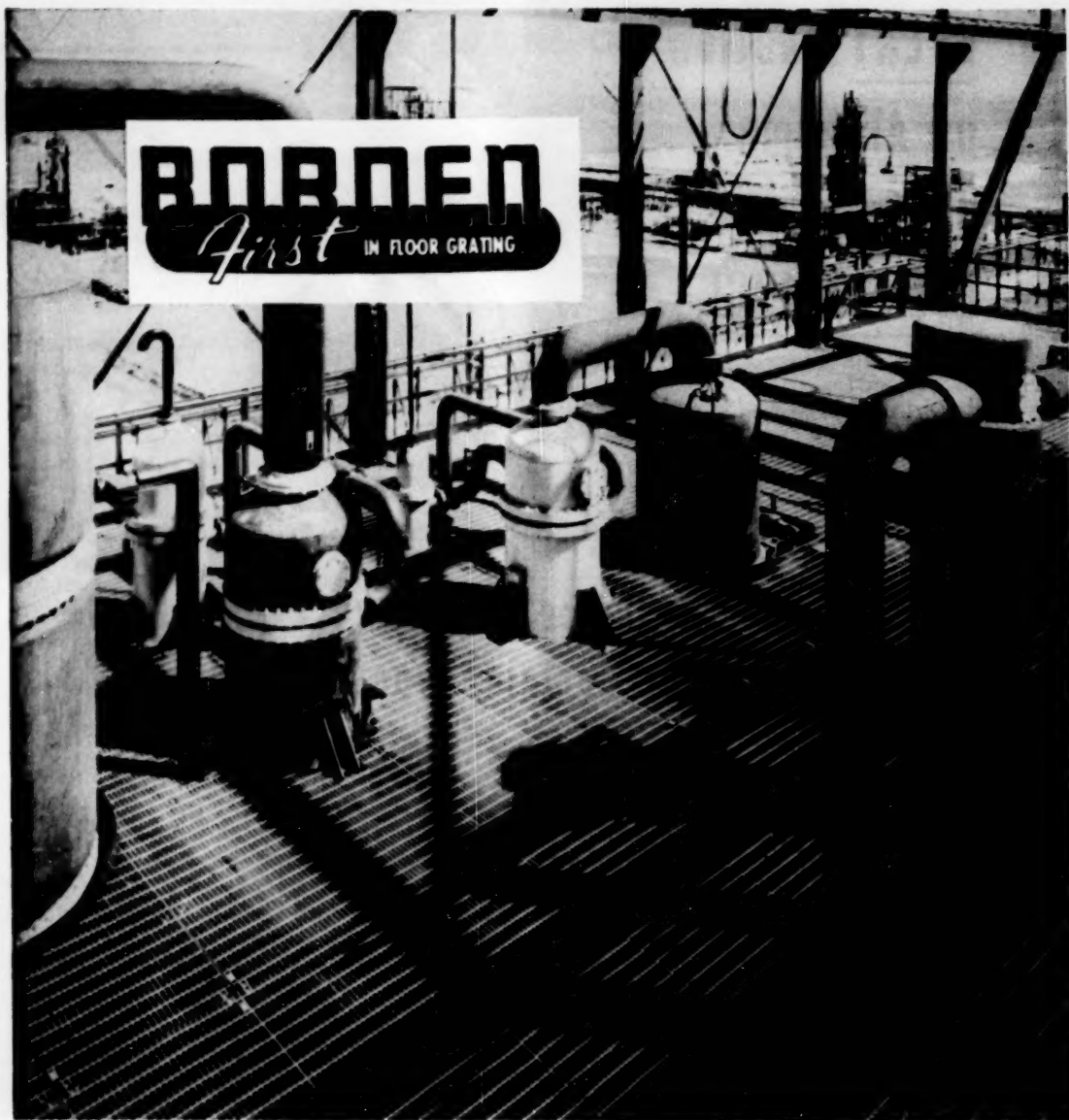
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Industrial Development Department

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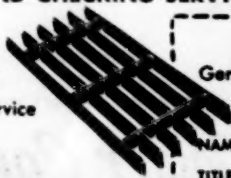
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"What Enriches the South Enriches the Nation"

Unrestrained Monopoly

One of the more interesting cases in the Federal courts today concerns a large union that has been charged by the government of running afoul of the anti-trust laws. The point at issue is this: The union has set up its own private business firm to supply merchant vessels in the Atlantic and Gulf Coast areas. The government has charged that the union is monopolizing that business in the areas mentioned, and therefore is breaking the law.

The union claims that because it stands immune from anti-trust prosecution as a labor union, its activities as acknowledged owner of a business are not subject to the anti-trust laws, no matter "how much trade is restrained."

The case itself is important because the concept of equality in the application of the anti-trust laws rests upon the government winning its case.

Of equal importance, however, is a broader concept of the purpose of the anti-trust laws. They were designed, obviously, to prevent the growth of monopolies, and the spread of monopolistic practices which would restrain trade, decrease competition, injure the consumer, and restrict personal freedom.

The application of these laws is difficult because of the dynamic growth of modern business. Originally business was their target, but today we have monopolies in government, and we have union monopolies which are every bit as destructive as the monopolistic business practices that brought about the anti-trust laws.

When one union can close down a major industry,

even in war time, there is no doubt that it wields the power of monopoly. It restrains trade; it decreases and actually obliterates all competition, and its effect is felt by the consumer and on the national economy.

As an example, when one union can halt shipping on the Atlantic coast, and another can halt truck transport on the West coast, they are guilty of monopolistic practices.

The source of the unions' monopoly power is industry-wide bargaining. The effects of this power are felt by us all, whether we are members of unions or not.

We suffer alike as consumers, and if we are union members we also suffer by being called upon to support, with our money, the strike of another local in the union that may be located hundreds or thousands of miles away. Such union members have no choice—they must support the strike, they are told by their union leaders, in order to preserve their own rights. In truth, they are forced to support a strike of another local in order to maintain the power-position of the union's bosses, in spite of the fact that such support works a hardship on the rank and file of union membership both as union workers and as consumers.

Everybody agrees that monopoly in business is bad. A union monopoly is worse. It is a menace to our national security, our free business and political institutions and our personal freedom. It will remain a menace just so long as Congress is afraid of the alleged voting power of a labor bloc. This is a sorry commentary on our democratic republic.

Credit Controls A Factor In Recent Market Stalemate

Yet a "cheap money" policy has bipartisan support and over the long run is here to stay.

By Robert S. Byfield
Financial Editor

During the past six weeks the stock averages have shown no net gain although there has been a wide disparity in the performance of various groups of shares. It is quite possible that the actions of the money managers in Washington which were referred to in our column of last month have begun to exercise some influence. We repeat our opinion that the Federal Reserve System has many weapons in its armory and warnings such as we have seen with respect to the tightening of margin requirements and the raising of the rediscount rate should not go unheeded.

We did not state and we do not now believe that an abrupt reversal in the long upward trend of the securities markets is in the cards. With the exception of a fringe of over-excited speculation, the vast majority of shares are finding their way into institutional and other strong hands. These purchasers are in the main convinced that their best interests lie in the acquisition of common stocks. They should not easily be shaken out in the event of a decline in business tempo.

The very substantial drop of some of the aircraft and other armament stocks to the low quotations reached early in May may have provided a very necessary adjustment. The interesting factor is that a corresponding decline in the general market was not triggered. Nevertheless, the action of the Federal Reserve System should be considered in its broadest aspects and in the light of the effect of such action on common stock prices in the past. Very rarely indeed are quotations for common stocks under a single influence at any given moment. Fluctuations *en masse* are almost invariably the end-product of many forces diverse in kind and unequal in impact. Classic exceptions were the outbreak of World War I in August 1914, a disruption which closed the stock exchanges in the United States; Pearl Harbor in December 1941 and Korea in 1950. Other similar but less spectacular instances might be cited. It is significant that all such occasions have one characteristic in common, they result

from governmental action. After all, wars are not private affairs. Even the 1929 crash was in part a long delayed aftermath or perhaps a final liquidation of World War I.

We feel that observers and analysts of security markets continue to under-stress the effects of governmental acts and policies. Before, during and after the recent Fullbright "study" of Wall Street and the stock markets too little mention was made of the role of the artificially low money rates which governments here and in Western Europe have persisted in maintaining since the Great Depression. Dr. L. Albert Hahn, an internationally known economist and a leading critic of the fiscal theories of the late John Maynard Keynes, pointed out boldly and clearly the results of "cheap money" through a low interest rate. He stated: "The appeal that low interest rates offer is derived from the fact that they enable the Treasury to finance and refinance the government debt on cheap terms. . . . The government is, so to speak, creditor and debtor in one person, because it fixes the rediscount rates of the Federal Reserve System. . . ." But he also calls attention to the truism that "low interest rates, enduring over a period of time, raise the price of common stocks whose earnings seem reasonably assured because the public capitalizes these earnings at a much higher price-earning ratio." (Italics ours.) A low interest rate achieved by governmental manipulation is one of the chief weapons by which the Welfare State seeks to impair the earning power of capital and transfer income from the higher to the lower tax brackets. Yet the rate of interest as a weapon to achieve redistribution of wealth has had some side-effects, annoying and embarrassing to Socialists and Socialist Fellow Travelers on both sides of the Atlantic. On this subject the London Economist of December 18, 1954 has some interesting comments: "The difficulty about redistribution, from the ethical point of view, is that in practice it turns out to be such a very blunt weapon where the finest distinctions are

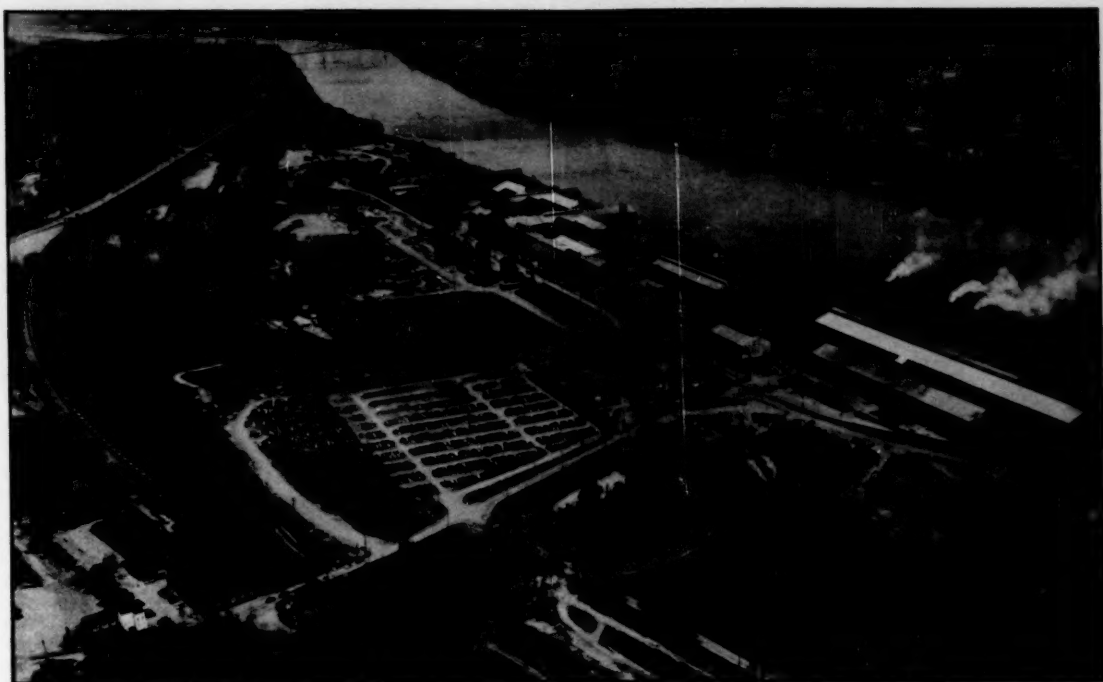
needed. . . ." Referring to the Bank rate or rate of interest the Economist continues: "Curiously enough, however, Labour is the cheap money party—no one in financial history has ever presented the capitalists with larger tax-free bonuses than Dr. Dalton. Yet it would be more logical if Labor were to declare itself the dear money party and give notice that it would utilize the slack thus created in the economy for the redistributive schemes in which it believes."

This statement is very revealing. The reference is to Dr. Hugh Dalton of the Labor Government's Cabinet and by the "tax-free bonuses" is meant the rise in British common stocks any profit from the sale of which is tax-free since Britain, unlike America, has no capital gains tax on its statute books.

For American investors it is clear that the bias in favor of "cheap money" rests upon a bi-partisan base and its permanency therefore cannot easily be challenged. What has happened here as in Britain is that conservatives have superimposed a climate of confidence upon the cheap money base which has contributed importantly to the rise in quotations for common stocks. If our reasoning is correct, then the actions of the money managers in Washington to correct excesses in the use of credit may be viewed as just that. It is a temporary measure. The experience of the Eisenhower Administration in the first half of 1953 when money rates were tightened to a point where government bonds sold measurably below par has not been forgotten. The balance which may be disturbed through the manipulation of the money rate are delicate. It will be preferable from the political point of view to make any adjustments or corrections in the credit situation during 1955 and the first few months of 1956. A year from now we will be approaching the 1956 political campaign with obvious connotations.

A feeling that the end of the "Cold War" is in sight has gained credence in some quarters. If this were actually going to be the case then an additional element of uncertainty would becloud the immediate future of the securities markets. Diplomatic maneuvers of the Kremlin have been on a vast scale for the past four or five months. It should be borne in mind that the Communist propaganda machine operates on a long range basis which in the past has involved temporary retreats at various times. They do not necessarily arise from weakness and they are fully provided for in the basic doctrines of Marxism-Leninism. After all these years of experience with the Kremlin no one should be deluded. However, the Western World is ready to go to almost any lengths for what it believes to be "peace." For some time in the future sweetness and light may continue to exude from Moscow, but when this tactic has been drained dry of its potentials a new reversal to a tough policy will be inevitable.

The American investor must take cognizance of such matters in his own long range investment policy.



The Ashland Kentucky, works of Armco Steel Corp., is situated between the Ohio River and the main line of the C. & O. Railroad. It is a completely integrated steel plant—from raw ore material to finished product.

\$15 Million Expansion Planned for Kentucky Steel Plant

Armco Steel Corporation recently announced plans for an additional \$15 million expansion and improvement program at its Ashland plant.

Details of the project were disclosed by J. M. Lobaugh, manager of Armco's Ashland Works.

"Our plans are aimed at rounding out the \$40 million hot strip mill program which was completed in 1953," Lobaugh said.

"Since that time we have added some large processing facilities and this new project is a continuation of that program.

"Because of the higher production level here at Ashland, additional building space for storage of both material in process and finished steel is needed. A second reversing cold mill will be added, together with a new strip normalizing and pickling line. Both of these facilities will also mean building extensions," he said.

"In addition, a new sintering plant will be built near Bellefonte blast furnace. This plant will convert into usable form

fine iron materials that would otherwise be wasted. These materials will then be recharged into our blast furnaces," he said.

"River transportation is an important factor in our operations," Lobaugh pointed out, "and our plans also include construction of a new river terminal just downriver from our main plant."

"Our Board of Directors has shown great faith in Armco people here and in the future of Ashland. These are the first steps of a larger long-range expansion program we hope to carry out here someday. Naturally, however, national and local conditions will have a great influence on how and when we expand further," Lobaugh said.

Lobaugh said that the expansion program would mean some new job opportunities at the Ashland Works in the future, but added that it was too soon to judge just how much the working force would be enlarged.

According to Lobaugh, the new facilities will not turn out any products not already being made at Ashland, but he

said that the output of some high grade specialty steels would be sharply increased.

Blueprints of the program have been in preparation for several months, and construction of the new facilities will get underway as soon as possible, Lobaugh said.

Armco's \$15 million project at Ashland is part of a widespread \$60 million expansion and improvement program the company announced earlier this year. Major improvements will also be made at Armco plants in Middletown, Ohio, and Butler, Pennsylvania, Lobaugh said.

Completion of the program will raise Armco's total steel producing capacity to over 5,300,000 tons of ingots a year, much of which is turned out in high quality, special purpose grades of sheet steel.

Electric utilities are the biggest customers for coal today, taking more than 22 per cent of total production and experts expect this demand to continue growing.

Southern Agriculture Ranks High

Fertility of Southern Soil and Rate of Return

On Capital is Often Underestimated.

By Caldwell R. Walker

Editor, *Business Trends*

SOUTHERN Farming is a profitable enterprise.

On the whole Southern Farming is more profitable than that of the Nation at large.

A statement such as this may come as a surprise in the midst of the widely held conception that the South must switch from Farming to Other Enterprise if the Southern income picture is to grow brighter.

Nevertheless the statement is an inescapable fact. Acre for acre of harvested soil, Southern farms show to better advantage than the average for the United States as a whole.

Dollar for dollar invested in farmland and equipment, Southern farms return better dividends than those of the Nation at large.

Average annual income per acre in the 16 *Blue Book* states of the South is \$54. That of the United States is \$44.

Average rate of return on investment in Southern farms is 24 per cent per year; that of the United States is 20 per cent.

Is there no merit, then, in the idea that Other Enterprise should replace Farming in the South?

There is merit in the intended idea but the foregoing statement does not correctly express the idea.

What is intended to be expressed is that there should be fewer farmers but not less farming in the South.

The fundamental difficulty attached to the attainment of satisfactory income from Southern farms lies not in a deficiency of realized income. It lies in the inordinate extent to which such income must be split up and distributed.

The entire situation can be summed up in one equation. For each individual of Southern population dependent upon soil for income there are only eight acres of soil that can be allotted for the purpose. The average for the United States is 15 acres per person.

The average annual income per farm person in the South is \$461. In the United States it is \$361.

Supposing for the moment that each Southern farm person had 15 acres instead of 8 from which to earn a living, it is not at all illogical to assume that individual income would be \$864 instead of \$461.

Stated conversely, if sufficient people should be shifted to all United States farms to make the acreage per person 8 instead of 15, the average income of the farm individual would be \$353 instead of \$461.

The range in acreage variability per person is quite vast, running from a low of 3 acres per person in West Virginia to 80 in North Dakota.

Generally speaking, high acreage per person means high income per person and conversely low income results from low acreage.

There are, of course, however, special circumstances which serve to qualify this general assumption. Among such conditions are those of soil and climate, and also proximity to prosperous markets.

With respect to soil and climate, Florida serves as a good example. While acres per person in this state run only to an average of 7, income per acre is \$182, resulting in a per person income of \$1,348, highest in eastern part of the United States.

With respect to marketing advantages, Massachusetts, Rhode Island, Connecticut and New Jersey are probably the most outstanding states. All lie in the midst of, or adjacent to, vast metropolitan centers that afford highly profitable markets for high-priced truck and specialty crops as well as for poultry, dairy and similar products delivered direct from farm to market.

These states enjoy unusually high income per acre—\$247 in Massachusetts, \$300 in Rhode Island, \$227 in Connecticut, and \$173 in New Jersey. Per person income is correspondingly high as may

be noted from the general tabulation which accompanies this article.

As a whole, the South is blessed with better than average soil and climate and with markets that are better than the U. S. average. Nature has done its part well so far as the South is concerned. Historical circumstances, however, have been such as to upset natural advantages.

If the South is to enjoy in full the fruits of Nature's bounty, ways and means must be found to divert human resources from farm work into other types of enterprise.

This does not by any means indicate the abandonment of any Southern farms. In the accomplishment of purpose, however, it does mean more than merely setting up new factories or offices or stores or utilities.

It means careful evaluation in each instance of markets and existing resources, both material and human, and the establishment of enterprise that is compatible therewith.

The only other alternative in the process of raising Southern incomes is continued migration of Southern labor force units to other regions, a procedure which has been going on gradually but steadily now for a number of years.

There are a number of questions to be met and answered in the resolution of a major project such as this, and not the least bothersome is the matter of racial complexes.

It goes without saying that a large segment of presently available work force in the South is nonwhite. The burning question is whether the South prefers to utilize this force or to have it distributed into other areas.

This is a question for Southern Industry to decide, but in the decision all facts should be made available, and in a following article it will be the object to show what the present racial complexion is in the South, and how it has changed from previous eras.

Farming—1954

State	Income \$ mil.	Capital \$ mil.	% Return	Farm Acres (000)	Inc. per Acre	Farm Pop. (000)	Acres per Person	Income per Person
Me.	\$ 73	\$ 231	32	932	\$ 78	122	8	\$ 598
N. H.	28	120	23	290	97	47	6	596
Vt.	44	197	22	859	51	81	11	543
Mass.	93	304	31	376	247	80	5	1,163
R. I.	12	44	27	40	300	10	4	1,200
Conn.	70	312	22	309	227	63	5	1,111
N. E.	320	1,298	28	2,868	114	403	7	794
N. Y.	372	1,481	25	5,792	64	578	10	644
N. J.	135	487	28	782	173	105	7	1,285
Pa.	340	1,520	22	5,637	60	705	8	482
M. A.	847	3,488	24	12,211	69	1,383	9	611
Ohio	554	2,906	19	10,296	54	853	12	650
Ind.	544	2,757	20	11,001	49	667	16	816
Ill.	868	5,538	16	20,364	43	763	27	1,137
Mich.	363	1,706	21	7,797	47	695	11	522
Wisc.	539	2,060	26	10,112	53	728	14	741
E. N. C.	2,868	14,967	19	59,570	48	3,706	16	774
Minn.	626	2,821	22	19,709	32	740	27	846
Iowa	1,069	5,601	19	22,547	47	783	29	1,365
Mo.	557	2,248	25	12,264	45	863	14	646
N. D.	223	1,178	19	20,353	11	254	80	878
S. D.	237	1,385	17	17,528	14	253	70	937
Neb.	434	2,783	16	19,407	22	391	50	1,110
Kans.	415	3,253	13	21,494	19	444	48	935
W. N. C.	3,561	19,269	18	133,302	27	3,728	36	965
Del.	36	93	39	389	93	34	11	1,099
Md.	111	513	22	1,531	73	183	8	607
Va.	287	1,276	22	3,314	87	732	5	392
W. Va.	85	476	18	1,218	70	411	3	207
N. C.	662	1,872	35	5,782	114	1,377	4	481
S. C.	214	787	27	3,960	54	701	6	305
Ga.	391	1,058	37	7,098	55	962	7	407
Fla.	314	880	36	1,728	182	233	7	1,348
S. A.	2,100	6,935	30	25,020	84	4,633	5	453
Ky.	362	1,571	23	5,054	72	974	5	372
Tenn.	305	1,425	21	5,175	59	1,016	5	301
Ala.	274	978	28	5,729	48	960	6	286
Miss.	357	1,111	32	6,136	58	1,097	6	326
E. S. C.	1,298	5,085	26	22,094	59	4,047	5	371
Ark.	350	1,106	32	5,930	59	801	7	437
La.	236	871	27	3,149	75	567	6	416
Okla.	289	1,855	16	11,896	24	553	22	532
Tex.	1,061	6,721	16	28,108	38	1,292	22	821
W. S. C.	1,936	10,532	18	49,083	39	3,213	15	603
Mont.	204	971	21	7,576	27	135	56	1,511
Ida.	178	906	20	3,648	49	165	22	1,079
Wyo.	69	419	16	1,901	36	57	33	1,211
Colo.	195	1,193	16	6,893	28	198	35	985
N. Mex.	100	633	16	1,898	53	132	11	758
Ariz.	176	489	36	884	199	77	11	2,286
Utah	79	463	17	1,279	62	81	16	975
Nev.	24	112	21	421	57	13	4	1,846
Mount.	1,025	5,196	20	24,500	42	838	29	1,195
Ore.	221	1,194	19	3,219	69	228	14	970
Wash.	345	1,448	24	4,237	81	274	15	1,260
Calif.	713	5,558	13	7,957	90	568	14	1,255
Pac.	1,279	8,209	16	15,613	83	1,070	14	1,196
U. S.	15,234	74,910	20	343,999	44	23,046	15	661
South*	5,955	24,747	24	108,672	54	12,732	8	461

*16 Blue Book States.



Mammoth assembly plant of the Ford Motor Company at Atlanta. An industrial giant such as this can do more to speed up the development of an area than any other single step.

Southern Area Development Teams Should Concentrate Efforts on Big Corporations Now Planning Expansion

By Sidney Fish

Industrial Analyst

MANY industrial areas which are seeking rapid growth today are placing primary emphasis on the recruiting of the industrial giants.

The acquisition of a plant of a major industrial company can do more to speed up the development of an area than any other single step. Each new major facility requires dozens of smaller suppliers to provide goods and services. The plant of a big company has plenty of money to spend for equipment, for maintenance and for local specialized consultants. It generally gets behind any movement to "make our town a better one to live in" and this helps to attract other new industries.

General Motors gives business to no less than 21,000 vendors. Of its annual volume of \$10 to \$11 billion a year, about 51 per cent goes to the suppliers. That is over \$5 billions, for materials such as steel, glass, tires, textiles, and for the many services required by an auto plant.

To acquire a steel, chemical or aluminum plant may mean even more to an area than the acquisition of an auto plant. For the location of a metal or chemical plant may serve as a magnet for auto plants and other producers of consumer products. And such finished product plants usually are the ones which make a very large addition to "value added in manufacture," because of the high labor content of the product.

But the figures show that the arrival of industrial giants in an area usually means a painful transitional period par-

ticularly for those smaller plants which will not be important suppliers to the big plant. The major transitional problems are a trend towards higher wage rates in the area, and strong efforts by unions to organize the entire area, particularly if it is a large populous industrial center.

A recent study by the Bureau of Labor Statistics showed that in companies employing 51 to 100 plant workers, only 55 per cent were covered by union contracts, while in companies employing 2,501 or more, 84 per cent were covered. In manufacturing industries, the percentage of plants organized today is 80 per cent or more, with the exception of furniture, textile and tobacco plants. In steel, rubber, aircraft and autos, for example, nearly 100 per cent of the plants are organized.

Thus far, a smaller proportion of workers in Southern manufacturing plants are organized, than in the rest of the country. In cities outside the South, at least 75 per cent of factory workers belong to unions, but the BLS study shows that around 50 per cent of the factory workers in Southern cities are covered by union contracts. In country areas, the Southern ratio is even lower. The survey covered 17 important areas in the country, with nearly 7.5 million employees. As more large employers move into the South, the proportion of workers who belong to unions will probably rise, but there will be some offsetting advantages from such industrialization, in the form

of a better balanced economy, and higher average incomes resulting from increased output per man hour.

The larger employers often are in a position to provide steadier work. General Electric, for example, is constantly distributing defense contracts and other new jobs among plants which have had cutbacks for one reason or another. The diversification of the company's output is thus a factor which tends to level off peaks and valleys in employment at individual plants. New products can be brought in to take up any slack owing to the long range product development program which larger companies usually maintain.

It is estimated that four-fifths of the \$4 billion which is spent on research in the United States each year is carried on by big business. Many of the biggest companies spend as much as 3 per cent of their sales on research and development.

Such programs, if they are carried on wisely, can mean rapid growth. Hence, the big company's plant usually has a better chance, not merely to stay, but to grow. The large companies build their new plants in such a way as to provide for future expansion. Its steam boiler or power plant, for example, may be built originally with enough capacity to take care of an output twice the size of the initial stage. Research, national advertising, and the other devices used by large organizations help to assure the growth that is planned for the future.

It is true, however, that once a town has placed most of its labor supply in a new plant, that it is, in a sense, putting its eggs in one basket. Anything that happens to that plant—whether it is a strike, failure of its product to hold its place in the market, defense cutbacks, etc.—will leave the town temporarily in very bad shape — much worse, in fact than if it had a diversified group of smaller producers. That is one of the risks that must be taken in recruiting industrial giants. Usually it is a good risk, because even if a new defense crisis arises, and the plant is making a non-essential civilian product, the history of World War II shows that the major companies have been quick to get defense work for such plants.

The increasing number of small and successful manufacturing and service companies today shows clearly that big business is not going to crowd little business out of the picture. There will always be room for smaller plants that have flexibility and low overhead. Many of these smaller plants will grow up to the industrial giants. Even while they are small, these plants contribute much to jobs and business activity in a town. It has been estimated that a new plant with 75 persons on its payroll will directly and indirectly provide jobs for 550 persons in the town, counting the new homes that must be built, additional auto service, new stores, doctors and other professional men, purchases from nearby farmers, trucking and taxis, etc.

Hence, the acquisition of a small plant, or a group of small plants, can help to give a town growth and increasing prosperity. But the big plants, with their high wage scales and high productivity, can contribute most quickly to an area's growth. In time, the big plant may be surpassed in size by the vigorous growth of one of the smaller plants in the area. The Brookings Institution made a study of big business which showed that of the 100 companies with largest sales in 1909, only 36 were still in this select group forty years later. But it must be remembered that those who had slipped from the top 100 were probably still in the second 100. Similar survival characteristics are not shown by new small businesses, in which the mortality is high.

The trend towards mergers is creating a new group of industrial giants in this country, or is at least accelerating this trend. And many successful small companies are growing rapidly. In 1947, it is estimated that there were 8,000 companies in this country with a net worth of \$500,000 or more. But by last year, the number had grown to 14,000. In this group, an area or a town can do much successful recruiting for new plants. For often this type of company sees the need for establishing a branch plant to take over the production of a specific product, or to improve its marketing set-up. Sometimes, too, this type of company finds that unsatisfactory labor market conditions are developing in its own highly industrialized area, and sees the need for moving to the South, where good labor may be more plentiful.

The merger trend has had important effects on industrialization of the South. Aggressive, rapidly growing companies like Rockwell Manufacturing Co., for example, on acquiring a new subsidiary, have the funds to establish a new plant for it in the South, where it will have larger capacity and better productivity. The diversification programs of the big companies are also aiding the development of the South, for often plants for these new products — air conditioning, electric blankets, home power tools, electronic instruments, etc.—are placed in the South.

The big expansion programs currently being mapped by large industrial companies, so that they can take care of the greatly increased demand for their products in the 1960s indicates that much can be gained by areas in the South if they carry an intensive recruitment effort among the major companies, as well as among those of smaller size. Armco Steel, for example, has under way a \$60 million expansion program, and it is considering increasing that effort so that it will be a \$327 million-seven year program, to be completed by 1962. Other steel companies have substantially expanded their new capital investments since the beginning of this year, and are looking to further expansion.

The chemical industry is enjoying substantially improved prosperity and is maintaining its status as a rapid growth industry by developing new products and by building the plants to make them. The auto and appliance industries see tremendous growth ahead by the 1960s. The cement, aluminum, titanium and electrical generating industries will all have to expand their capacity to take care of the bigger markets that lie ahead.

In each of these basic industries, large corporations have become the dominating influence. To get its full share of industrial growth—and more—the South will have to maintain an intensive campaign to induce the leading companies to place some of their plants in advantageous Southern locations. For industry to follow any other course would mean further unwarranted concentration in Northern industrial centers. This would be undesirable for the national economy.

Eugene G. Grace, Chairman of the Board of Bethlehem Steel Corporation, says that his company will have to add 8 million tons of new capacity in the next ten years, merely to hold its present proportion of the industry's output. Some of the new construction of the steel industry, he says, will have to consist of new integrated plants at new locations.

To assist industry in financing the construction of such integrated plants, the South should support a liberalization of allowable depreciation deductions by corporations for tax purposes. The present deductions on older plants are not sufficient to make provision for replacement of older facilities, which cost less than a third as much as present-day plants do. The steel industry estimates that a new integrated plant costs about \$300 for each ton of annual capacity. To expand an older plant, however, costs \$100 a ton or less. Hence, unless depreciation incentives are provided for building new integrated plants, a very high proportion of the forthcoming expansion program will be in the form of additions to existing plants.

Sound national measures, as well as local efforts, can help the South induce the big industrial corporations to place new plants in Southern States.



Right To Work Laws

Help

Southern Economy

By McLellan Smith

FOR the past two years or more, labor unions, supported by misguided idealists, have been waging vigorous war against the Right to Work laws now in effect in 18 states, 10 of them in the South. In opposing these laws which guarantee to every working man (and woman) their constitutional right to determine for themselves whether they want to join a union or not, opponents have tried to becloud the issue with "facts" which do not stand the test of economic reason. In tossing out these "facts," opponents of RTW laws ignore the affront to individual rights and liberties in forcing a worker to join a union and try to mislead workers and management alike by contending that these laws hurt business.

Careful study of economic statistics, compiled by agencies of the U. S. Government, reveal the contention to be wrong.

Twelve states—Arizona, Arkansas, Florida, Georgia, Iowa, Nebraska, North Carolina, North Dakota, Tennessee and Virginia have had Right to Work laws on their statute books or as part of their Constitution since 1947. Florida has had such a law since 1944, while six others—Alabama, Louisiana, Mississippi, Nevada, South Carolina and Utah—have passed such laws since then, but too recently for available Federal statistics to prove significant in economic gain or loss.

The economic improvement records of the 12 states in all the main indices of prosperity and a healthy economy between 1947 and 1953 (last year for which comparable figures have been compiled by Federal Agencies) is equal to, and in many instances, well ahead of, the figures for the other States of the Union.

Let's have a look at facts and figures from Government records, not subject to change or alteration by any group:

In the six-year period, total non-farm employment in the Right to Work states increased 22 per cent, more than half again as much as the rest of the country.

Civilian population in the RTW states increased more than 30 per cent above the increase in the other 36 states and the District of Columbia.

The number of businesses in operation in the 12 RTW states increased 26.6 per cent, against a 12.2 per cent increase in the rest of the country.

In RTW states, retail sales were up 52.9 per cent; in the other states, 44.1 per cent.

Business and personal savings, as revealed by time deposits, went up 34 per cent more in the RTW states than in the others.

These facts point up that the RTW states, since passage of laws protecting the rights of their workers to join or not to join unions, have advanced steadily in most fields that are accepted as indicative of general prosperity.

No one can assert that RTW laws are the sole reason for this improvement, but to ignore the economic advances of RTW states is to be dishonest in arguing against these laws, basic to freedoms guaranteed under our Constitution.

Industrial and commercial employment in the states which have had RTW laws since 1947 have moved steadily upward. New jobs have been created, many thousands of workers—many of them union members—are getting higher wages. Total non-farm employment in the RTW states has increased 63 per cent more than in the other 26 states and the District of Columbia.

In three of the RTW states—Arizona, Florida and Texas—the increase was more than double the overall increase for the states where compulsory union membership is permitted!

Opponents of RTW laws have charged such laws are "low wage schemes" designed to benefit only the proprietor without regard for the welfare of his workers. The January issue of *Economic Outlook*, published by the Congress of Industrial Organizations (CIO) declared: "All the 'Right to Work' states had per capita personal income in 1953 below the national average..." It did not point out, however, that per capita earnings of workers in those states, still largely agricultural, have always been somewhat lower than those of workers in the more highly industrialized regions.

Another omission of the CIO publication—perhaps deliberate—was the fact that per capita earnings in 12 of the states which have had RTW laws since 1947 have increased at an average rate higher than those in other states. Seven of them showed increases substantially above the average of the other 36, one was a fraction higher, while only four had a smaller rate of increase.

Combined average increases in per capita earnings in the 12 RTW states was 43.36 per cent; the combined average in the other 36 states and the District of Columbia was 42.96 per cent. By individual RTW states the per capita increases were: North Dakota 47.35; Texas 46.2%; Tennessee 45.9%; Arkansas 45.5%; South Dakota 45.0%; Arizona 44.9%; Iowa 44.5%, and Nebraska 43.0%. Four of the RTW states were below the 42.96% average for the others—Georgia 41.3%; Virginia 39.3%; North Carolina 38.8%, and Florida 37.4%. These four still have heavy agricultural economies.

Opponents of the RTW laws seem to be specious in their arguments, but they may lack all of the facts. The CIO's January *Economic Outlook* contends that states passing RTW laws do so to attract new industry through holding wages down; but it blandly cites studies which show that new industry is primarily attracted by three considerations—markets, raw material resources, and an ample supply of manpower. "Furthermore," the CIO paper declares, "where labor has been a primary factor in locating new plants, more emphasis has been placed on availability and on labor attitudes than on wage rates." It is difficult to disagree, but one is puzzled at the point the CIO is trying to make.

Getting back to economic indices in the states having RTW laws, we turn to new construction as a dependable measurement of a healthy economy. Figures from the U. S. Bureau of Labor Statistics, covering investment for new construction in 24 states from 1947 through 1951, reveal the RTW states with excellent new construction records. In 19 union shop states, investments for new construction increased from \$10.3 billion in 1947 to \$18.8 billion in 1951, or 82.5 per cent. In five states having RTW laws—Florida, Georgia, Texas, Tennessee and Virginia, the increase was

from \$2.6 billion to \$6 billion, or 91.9 per cent.

Perhaps more conclusive than the new construction figure is the comparison of the increase in total firms in operation between RTW states and union shop states. The U. S. Department of Commerce's Office of Business Economics reports that, between January 1, 1947, and January 1, 1954, the number of firms in RTW law states all during the period increased 12.6 per cent. In the rest of the country the increase was only 12.2 per cent. Of these 12, ten states had increases above the national average; four of them more than doubled it, while only two were below.

Those who oppose RTW laws tell labor that such laws restrict the economy, lower wages and bring about less purchasing power for the consumer. The records simply do not support the claim. Data from a survey by *Sales Management*, the *Magazine of Marketing*, reveal the combined increase in retail sales between 1947 and 1953 was almost 20 per cent greater in the 12 RTW states than in the rest of the country. Retail sales in the RTW states increased 52.9 per cent, while retail sales in the remainder of the country increased only 44.1 per cent.

One cannot positively assert RTW laws were solely responsible for these favorable indices, nevertheless the 12 states which had them between 1947 and 1953 showed better records in category after category than did the states without them. Civilian population in the RTW states increased 30 per cent more than in the other states and the District of Columbia. Registration of privately owned autos increased 60 per cent in RTW states, compared with only 48.2 per cent in the rest of the nation. Savings deposits in the 12 RTW states were up 35.1 per cent in the 1947-1953 period, while the increase for the rest of the country was only 26.2 per cent.

A notably significant effect of the general improvement in the economy which has followed enactment of RTW laws is shown in vastly improved labor-management relations, as evidenced by man-days lost in work stoppages. Between 1947 and 1953 man-days lost in the 12 RTW states fell by 30.9 per cent while the decline in the other states was only 16.6 per cent.

These records effectively refute the charge that Right to Work laws hamper, rather than help business growth.

The question of the Right to Work without compulsion vs. forced membership in a labor union for that privilege, is a simple one: Shall American citizens determine for themselves whether they want to join a union, or shall they be given no choice and be forced to join in order to earn a living?

Opponents of RTW laws try to befog this basic issue of freedom in "The Land of the Free." They skip over the affront to individual rights and liberties in forcing a worker to join a union and try to mislead by contending that RTW laws hurt business. The facts which have been given here show the opponents are wrong.



Artist's conception of the new 75-bed Seminole Memorial Hospital at Sanford, Florida.

Seminole Memorial Hospital Nearing Completion at Sanford

Construction of a new 75-bed hospital is nearing completion at Sanford, Fla. It will replace an inadequate 24-bed facility which has been in operation for 35 years in a former private residence donated to the city for that purpose.

The hospital, which will be known as the Seminole Memorial Hospital, and its surrounding grounds will occupy an entire city block overlooking the St. Johns River. The location has many advantages as it is in the downtown area, yet away from heavily traveled thoroughfares and the business section.

The building which will be air-conditioned throughout is of Roman brick and stucco over reinforced concrete. The first floor will contain the kitchen, administration offices, examination rooms, snack bar, conference rooms, laboratory and X-ray facilities, and morgue. The second floor will contain thirty rooms, four of which will be private. There are 45 rooms on the third floor with seven private rooms. Other third floor rooms will be furnished with two beds, thus making possible the conversion of a semi-private room into a private one by the removal of a bed. The second and third floors have identical maternal wards, isolation and pediatric wards, delivery

suites and solariums. One central operating room will serve both floors. Air conditioning and other mechanical equipment is located on a "pent-house" on the roof.

Arnold Construction Co. of Palm Beach was given the contract for the construction of the building which has been planned so that additional rooms may be added later. Barnes Restaurant and Supply Company of Orlando is furnishing kitchen equipment; Diesel Equipment and Service Co. of Orlando is installing the emergency generator. Medical Supply Company of Orlando was awarded the contract for furnishing surgical lights. Sterilization equipment is being supplied by Ohio Chemical and Surgical Equipment Company of Madison, Wisconsin, and American Sterilizer Co. of Erie, Pa.

Total cost of the hospital, \$1,119,488.93, is being met by an \$800,000 county bond issue which a three-mill county tax will retire within thirty years, a bequest of \$250,000 from the late Bert Fish, and a grant of \$370,000 from the Florida Improvement Commission, Florida agency for the distribution of Federal Funds over the Hill-Burton Act.

E. J. Moughton, Sanford, and J. Gamble Rogers, II, Winter Park, are the architects.

Construction on American Oil's Yorktown Refinery to Start

With preliminary surveying now underway, construction of American Oil Company's new 35,000 barrels-per-day refinery near Yorktown, Virginia, is expected to begin in mid-summer, according to The M. W. Kellogg Company, which is designing and will build the plant's major processing units for the production of LPG, motor gasoline, middle distillates and fuel oil.

This new refinery is planned to augment the gasoline production of American Oil's 145,000 BPD refinery in Texas City. The process units to be built by Kellogg for converting this crude will include a 35,000 BPD atmospheric and vacuum distillation unit, a 30,000 BPD Orthoflow fluid catalytic cracking unit and gas recovery plant for 95 per cent recovery of propane and propylene, catalytic polymerization including a de-ethanizer in the fractionation section and units for treating gasoline and kerosene.



The Port of Corpus Christi is embarking on a twin drive for more cargo and more new industries. A new bridge as high as a 23-story building will replace the narrow bascule shown in the foreground, and a widened and deepened channel will permit two-way traffic.

\$68,000,000 Port Improvement Launched by Corpus Christi

A \$68,000,000 port improvement, bridge building and traffic expressway construction program, which will be accompanied by twin drives to bring in more industries and increase port traffic has been launched by civic and governmental agencies of Corpus Christi.

The way for this huge development was cleared when voters of Nueces County, in which Corpus Christi is located, approved \$15,575,000 in bonds by a thumping eleven to one majority. These bonds will be used largely for rights-of-way. Approximately three times this amount will be contributed by the State and Federal governments and other governmental agencies.

The major improvements will be a new six-lane bridge over the Corpus Christi Ship Channel, highest in the Southwest, to replace a bascule, or lift bridge which had become a hazard to navigation and a bottleneck for vehicular traffic.

An elaborate system of expressways will be built to handle bridge traffic, and cardinal highways serving the Corpus Christi area will be widened and improved.

The entrance channel will be realigned to eliminate "dog leg" bends and widened to 400 feet to allow two-way navigation. In addition, the channel will be extended four miles westward from its present terminus at Tule Lake and will be deepened from 34 to 36 feet.

These improvements will lay the groundwork for intensive drives to increase the port's commerce and to bring more new industries into the already booming Corpus Christi area, according to Edwin Singer, president of the Board of Trade of Corpus Christi, and Byrd Harris, director of Corpus Christi's busy port.

"The four-mile channel extension will provide eight more miles of deepwater frontage, which means that there will be plenty of room in which to grow industrially," said Mr. Singer. "In addition to excellent port facilities, we can offer new industries good climate, good living conditions, plentiful and economical fuel, nearby sources of raw materials, expanding markets and a favorable labor supply."

Mr. Singer expressed gratification that the bond election drew one of the largest

turnouts in Nueces County history to vote overwhelmingly in favor of the bonds.

"That is an important selling talk in attracting new industries," Mr. Singer explained. "It shows that the people of this area are wholeheartedly back of their port and the industrial expansion which the port improvements will bring. It spells good relations between the community and its industries which is a vital consideration in selecting a plant site."

And Port Director Harris predicted that the improvements will make Corpus Christi the best port on the Gulf Coast. He added that a substantial increase in port tonnage could be expected.

The \$15,575,000 in bonds will be issued jointly by the county and the Nueces County Navigation District. This money will be used principally to buy rights-of-way for the bridge, to improve harbor and port facilities, for expressways and highways and to absorb part of the cost of a new upper channel crossing and relocation of railroad tracks.

With the bonds voted for this preparatory work, the state has agreed to expend \$46,640,000 for the huge \$9,000,000 suspension bridge and construction of highways and expressways.

The federal government, on its part, has agreed to contribute \$4,085,000 for part of the cost of the upper channel crossing and for removing the old bridge after the new one has been built. Also, the government has appropriated \$400-

(Continued on page 54)



The famed 400 year old fortress of El Morro guarded the approaches to San Juan for centuries and now greets visitors by land and sea.

Puerto Rico Industrial Expansion Boosts Purchases From South

\$186,000,000 in Goods Shipped to Commonwealth Through Southern Customs Districts.

PUERTO RICO's industrial expansion, the result of a unique, incentive-laden economic development program called OPERATION BOOTSTRAP, has created a sharp increase in Commonwealth purchases from southern markets in the past seven years.

A special study completed recently by the Puerto Rico Planning Board from U. S. Census figures for the year 1953 shows that products valued at some \$186,000,000 were shipped to Puerto Rico through the southern customs districts of Florida, Mobile, Maryland, Virginia, North Carolina, South Carolina, Georgia, New Orleans, Sabine, Galveston and Laredo. According to a second analysis, an estimated \$100,000,000 worth of prod-

ucts come to Puerto Rico currently from southern farms and factories each year.

Frequent Sailings from South

An indication of the purchasing power of Puerto Rico in the South is the fact that more than half of the monthly sailings from the mainland to Puerto Rico originate, or make pick-up layovers in southern ports. Total monthly sailings number 84, and 44 of these start or call at southeastern or gulf ports. The \$100,000,000 in goods now being purchased in the South by Puerto Rico represents more than 20% of its total mainland purchases, which in 1953-54 amounted to \$468,000,000.

Puerto Rico's economic picture has brightened sharply since 1948 when OPERATION BOOTSTRAP first began to bear the fruits of its endeavors. Since that time the island's net income has jumped from \$659,000,000 to \$961,000,000 and its gross product from \$773,000,000 to \$1,172,000,000. More than 300 new plants are now operating in Puerto Rico under the program which has created nearly 50,000 jobs here since 1948.

Operation Bootstrap

Probably the most enticing features of OPERATION BOOTSTRAP are its tax exemption incentives. Because the Commonwealth has no voting represen-



San Juan's up-to-date dock and shipping facilities. A new \$23,000,000 port development program is under way at Catano, across the harbor.

tation in Congress, the island is not subject to the federal income tax law. With local provisions for 10 years of exemption from Puerto Rican taxes for qualified firms, plus other property and personal tax advantages, factories establishing here under the program are virtually tax-free.

As a matter of consistent policy, however, the Commonwealth has always emphasized that its industrial development must not be at the undue expense of other areas of the United States. For this reason it has denied and will continue to deny tax exemption or any other specific benefit to any firm or individual proposing to close a plant elsewhere in the U. S. to establish in Puerto Rico.

In the past six years, total capital investment from mainland sources in the industrial program in Puerto Rico has reached some \$34,000,000; to this was added \$38,000,000 from Puerto Rican resources. The mainland investment here is vitally important to the Commonwealth, but it actually represents less

than 1/10 of one per cent of the \$55,000,000,000 spent on industrial plants and equipment on the mainland during the same years.

Among the companies that have inaugurated plants here while still maintaining or even increasing their operations in the mainland are 18 firms from 10 southern states including Delaware, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, Tennessee and Texas. They represent manufacturing in hosiery, uniforms, sporting equipment, wearing apparel, optical equipment, brassieres, glass products, plastics and other fields.

Puerto Rico's purchases in the South cover a wide range. They include manufactured cotton goods, cotton yarn fabrics, manufactured silk goods, nylon and other synthetic products, paper and paper products, fertilizers, meat and dairy products, boots, shoes and leather, dairy and poultry feeds, lumber, petroleum products, stone, cement, lime, vegetables, juices, cigarettes, wool yarns,

furniture, glass products, concrete products, steel products, tin cans, metal manufactures, industrial machines and parts, milled rice, aluminum products and many other items.

In addition to its tax exemption features, OPERATION BOOTSTRAP offers manufacturers the services of the Economic Development Administration, the Puerto Rico Industrial Development Company and the Government Development Bank in locating plant sites, financing, factory construction, obtaining and training labor and other special incentives to help a firm plant the roots of a new or expansion factory here. In addition, Puerto Rico can point to modern trucking facilities, freight rates to anywhere in the world, an adequate labor supply at favorable wage rates and free trade with U. S. markets. As an integral part of the federal framework, no tariff barriers exist between the Commonwealth and the mainland.

Some of the business giants already manufacturing in Puerto Rico include Remington Rand, U. S. Rubber, Carborundum, Sterling Drug, Sylvania, Bealnit, Textron, Bostitch, American Steroids, Consolidated Cigar, Frawley Corp., Hickok, Weston, and others.

Methods of Operation

Puerto Rico's Economic Development Administration maintains Industrial Promotion Offices in New York, Chicago and Los Angeles in addition to San Juan, and has representatives in Washington and Boston. A staff of some 15 Industrial Representatives are kept constantly active on the mainland in contacting manufacturers or their representatives interested in the industrial possibilities of Puerto Rico.

Industrial Representatives from the New York office include southeastern states in their territories while the south central and southwestern states are in the province of IR's out of Chicago. Industrial Representatives create an "area promotion" in the various territories to display at first hand to manufacturers in their home cities just what Puerto Rico has to offer.

When an entrepreneur arrives in Puerto Rico it is the job of the IR's on the spot to answer all his questions, try to solve any problems which might confront him and explain, once again, the entire program. In addition, the IR shows the manufacturer the island, checks site locations, visits plants with him, contacts other agencies when further coordination becomes necessary, obtains all information concerning building costs, financing arrangements, shipping costs by air and sea, labor availability, living quarters and conditions for state-side personnel who may come down to get the operation started, and attends to many other details.

Economic Gains Great

The widespread economic gains enjoyed under OPERATION BOOTSTRAP are pointed out in figures compiled by



Recently dedicated in a three day celebration was Puerto Rico's new \$15,000,000 International Airport. It is less than 20 minutes from San Juan.



In the heart of the tobacco country, near Caguas, is the new \$1,000,000 Consolidated Cigar Company plant. The plant turns out 100,000,000 cigars annually.

the Department of Economic Research of the Economic Development Administration. Since 1940 net income from agriculture has jumped from \$70,500,000 to \$168,000,000 while the value of agricultural production was going up from \$83,800,000 to \$213,500,000. Manufacturing net income in fiscal 1954 reached \$143,200,000 as against \$26,400,000 in 1940. Wages and salaries last year hit \$557,800,000, an increase of 37.5% over the \$117,300,000 of 1940. Over the same period unemployment dropped from 112,000 to 72,000 in a labor force of 631,000 workers.

The expanding economy is enabling Puerto Rico to improve and add to its public works. A new \$15,000,000 airport about 20 minutes outside San Juan is rapidly nearing completion and is scheduled for inauguration on May 20. A \$32,000,000 project of dams, reservoirs and power stations is going up to convert the barren southwest corner of the island into a veritable Garden of Eden by reclaiming some 30,000 acres of now unusable land for farming while adding heavily to the water supply there and boosting electric power by 100,000,000 kw hours per year.

The Commonwealth is constantly improving existing traffic arteries and building new roads. New schools, hospitals, clinics and public housing developments have sprung up in virtually every community on the island and private builders are also placing their full efforts behind the program to improve the standard of living in Puerto Rico.

To support this growth, Puerto Rico now is purchasing goods valued at \$1,282,000 every single day from mainland markets—and over a quarter million dollars daily is bought in the South. Add to this the key role of southern railways, trucking lines and ports—truck drivers, longshoremen, warehousemen, merchants, freight agents and the like—in providing to Puerto Rico goods from all over the country and carrying back the products of Puerto Rico's farms and factories, and a clear picture comes into focus of what this island in the Caribbean means to the South.



A new web of super highways has brought all corners of the Island closer together and is contributing to the growth of manufacturing plants.

Mobile Supply Firm Marks 50 Years of Service

Turner Supply Company of Mobile, Alabama, distributors of machinery, contractors' equipment, industrial and electrical supplies, and steel products, celebrated its 50th anniversary in May of this year.

It was no small celebration as the public was invited to the affair which marked the company's move into a spacious new plant including offices and expansive warehouse space at 250 N. Royal street.

The new structure, built at a cost of more than \$300,000, has a total floor area of 74,340 square feet, 41,011 of which are devoted to the general warehouse area, 12,432 to a steel goods warehouse section and 8,378 to a specially designed mezzanine deck area for storage of electrical items.

The warehouse has a loading and truck dock area capable of facilitating any type or size vehicle, comprising 4,332 square feet.

There is also spacious parking for customers and the building is served by a railroad siding.

In celebration of the move and fifty years of continuous service to Mobile and the broad Greater Gulf State trade area the Turner Supply Company held open house for three days. Guests saw exhibitions of various materials, supplies and machinery by manufacturers the company represents locally.

"This was one of the most extensive industrial exhibits of its kind ever held in Mobile," according to Howard M. Schramm, president of the company since 1929.

The floor layout of the Turner Supply Company's new building is designed in

such a manner as to promote the most efficient and expeditious processing of orders and handling of merchandise found anywhere in the general supply business today, according to Schramm.

Designed by Architect N. H. Holmes of Mobile, the structure was built by Bernard & Byrd, Incorporated.

The building, of brick, steel and concrete, was started in June 1954 and was completed in March 1955. Soon after its completion the company began moving all its inventory and equipment from its old location at St. Louis and Commerce streets which it had occupied since 1909. Altogether, 4982 man hours were consumed in the transfer from the old to the new location.

The well-lighted, air-conditioned offices are directly interconnected with the warehouse facilities and fitting directly into a well-integrated pattern of efficient merchandise processing is the sales counter, located just off the lobby for the convenience of customers using the main entrance. The sales, electrical, purchasing, credit, mail and file, and engineering departments are situated in the general floor pattern to achieve the maximum in efficiency.

One unique feature of the company's new plant lies in the fact that all employees, from the president down, have desks in the general office area where they can maintain constant customer and interoffice contact. Yet at the same time, there are private offices which can be used by any salesman or officer as the occasion demands.

The company represents some of the leading manufacturers of the nation, and as President Schramm points out, is constantly striving to see that it serves all



Howard Schramm, President

its customers with lines of the highest quality.

Soon after its founding in 1905 by the late W. Marshall Turner, the early business of the company was based largely on serving the flourishing sawmill industry. But as industrial diversification came about in the Gulf area, the company constantly expanded its services to meet the changing times.

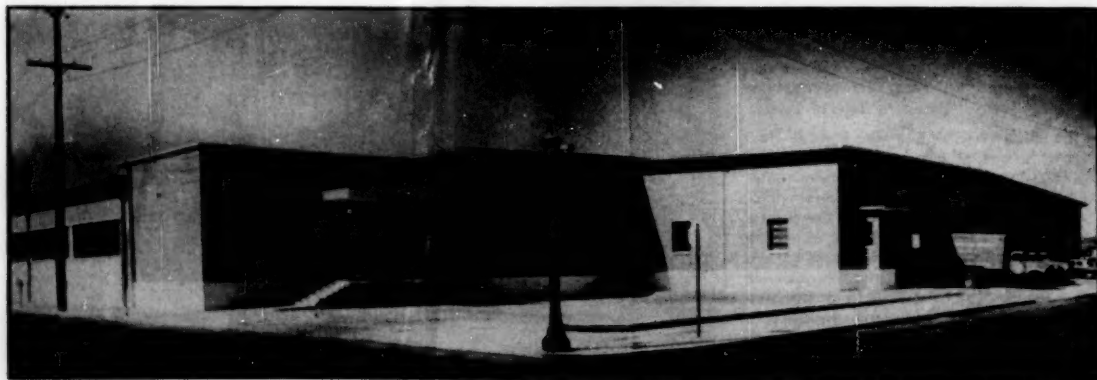
In 1926 the company added to its machinery and industrial supply lines a complete stock of electrical equipment and supplies to service electrical contractors as well as all other types of industry.

The company has been in continuous business since it was chartered in December, 1905. Its first location was at 21 S. Commerce street. The new building is the first structure owned entirely by the company. Previous locations were used under leasing arrangements.

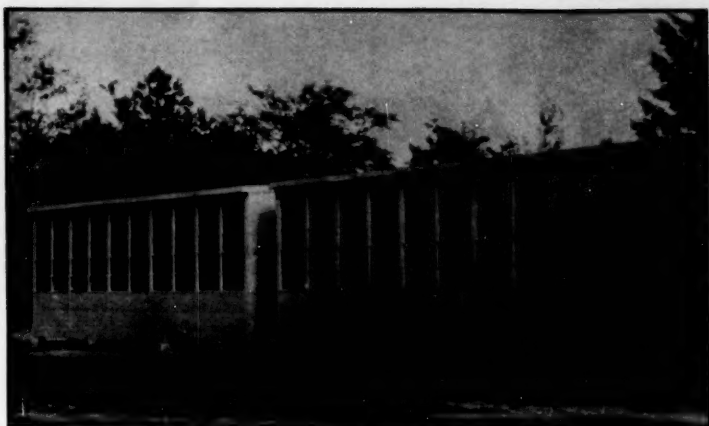
The company at present has a total employee roster of 102, consisting of 81 male and 21 female employees.

Officers of the company, in addition to Schramm, are H. Leo Ollinger, vice president and treasurer; R. E. Sweigart, vice president and secretary; Henry B. Tonsmeire, vice president and sales manager; Charles S. White-Spunner, vice president and purchasing agent, and J. B. Finley, assistant secretary.

Directors are Schramm, Ollinger, Sweigart, Tonsmeire, White-Spunner, A. O. Treutel, and A. B. McLean.



The new home of Turner Supply Co., built at a cost greater than \$300,000, furnishes 74,000 square feet of floor space for the 50-year-old firm.



A South Carolina Architect's answer to crowded school rooms and a shifting population.

Portable Schoolrooms Designed To Handle A Shifting Population

Architect J. Whitney Cunningham, of Sumter, South Carolina, has come up with a solution for a perplexing problem confronting many School Boards throughout the United States. This problem is the shifting of population within school districts.

Many school buildings are enlarged to take care of what may turn out to be only a temporary need for additional rooms. The population shifts and a costly addition, designed to conform to the architecture of the old school, is wasted. The rooms are now needed at another school.

Mr. Cunningham says individual classrooms provide the answer. He has designed what he calls the Perma-Porta School Unit. These units can be assembled to an existing building and provide an effective addition of permanent quality with as many classroom units as may be needed. When populations shift and needs arise in other areas of a school district, the units may be moved to the new site by truck-trailer without dismantling.

Each classroom unit is a separate welded steel structure. It is insulated throughout and has its own heating unit concealed in a cupboard. Electrical facilities are provided by a plug-in method.

Each unit is 22 ft. wide and 30 ft. in length. Projected windows run the full length on one side. Diffusing glass is used above eye level. Thus the units are brightly lighted yet protected from glare.

The steel frames are formed with structural tees, cut on a bevel from beams, and are spaced about 6 ft. on centers. The frames are welded to a steel-framed base which also supports the floor. Perforated acoustical steel panels form the roof deck, on which is placed

1½ in. fiberglass insulation, 1 in. insulated form board and 4-ply built-up roofing.

Wall panels are steel with 3 in. fiberglass core and felt insulation for joints. For floor construction, a lightweight steel deck is placed on the steel-framed base with fiberglass insulation, two layers of plywood and an asphalt tile wearing surface. Windows and doors are steel.

The entire structure is welded together into a rigid unit. Jacking plates are permanently attached to each unit. The complete classroom can be jacked up onto a low-bed truck and moved to another site in not more than one hour. The unit is connected to the parent school building only by power lines. The only other connection to be cut is the pipe from the furnace to the oil tank which is placed outside of the unit.

Four Perma-Porta units have been built and are now in use in Conway, South Carolina. These units had been practically completed when Hurricane Hazel struck the South Carolina Coast. Conway is only about 12 miles from the coast. The Perma-Porta units, while not anchored to the concrete foundations, withstood winds of well over 100 miles per hour without movement on the foundations or damage of any kind. Each complete unit weighs about 32,000 lbs.

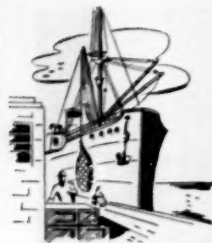
The architect was J. Whitney Cunningham, Sumter, South Carolina, general contractor was C. B. Askins, Lake City, South Carolina, and the structural steel was fabricated by Owen Steel Company, Columbia, South Carolina.

Calvert City, Kentucky Plant Gets \$3,000,000 Addition

Air Reduction Company has announced plans to erect a \$3,000,000 addition to its Calvert City installation, bringing its plant investment there to \$23,000,000. The new plant, scheduled for completion early in 1956, will adjoin the carbide and acetylene generating units of Air Reduction's National Carbide division, and will produce vinyl-acetate monomer, a chemical used in the manufacture of numerous plastics and emulsions.



PORT



ACTIVITY

ALABAMA

Mobile

Tonnage Increase — Alabama State Docks and Terminals handled 476,893 tons of traffic in March. This figure reflected an increase of 14 per cent over February but again inbound traffic caused the total tonnage to be 36 per cent below March 1954. Accumulated totals for the two years showed that total traffic in the first quarter of 1955 was 27 per cent below the corresponding 1954 period.

Outbound traffic continued to gradually rise in March as it increased 15 per cent over February to 138,372 tons and was 159 per cent above the previous March. The animal products category, which accounts for only a fractional part (less than one per cent) of total outbound traffic, was the only category which was below March 1954. The outgoing shipments of products of agriculture, products of mines, products of forests, and manufactured and miscellaneous products were each substantially above the previous March. Products of mines, which accounted for 16 per cent of total outbound traffic in March 1954, made up 52 per cent of outbound traffic in March 1955. Total outgoing shipments in the first quarter were 89 per cent above those of the first quarter of 1954.

Inbound traffic in March amounted to 338,521 tons, 14 per cent above February but 36 per cent below March 1954. Incoming shipments of products of mines dropped 35 per cent from last March while the manufactured and miscellaneous products category was 49 per cent below March 1954. On the other hand, the products of forests category rose from less than one per cent of total in March 1954 to 2 per cent of total incoming shipments in March 1955.

\$350,000 Warehouse nears completion

A new 50,000 square foot warehouse designed to provide storage facilities for general cargo, principally imports, is now under construction at the Alabama State Docks, and is scheduled for completion by July of this year.

Designed as storage warehouse "A," the giant structure will afford the following facilities: truck loading platforms at each end, rail car loading on the north

side, three transport truck entrances on the south side at road level.

According to J. P. Turner, General Manager of the Docks, the warehouse will be used primarily for storing imports of canned pineapple, desiccated coconut, crude rubber and jute bagging from the islands of the Pacific and the Far East; peat moss, safety matches from Europe; newsprint paper from Europe and Canada; and other commodities from various foreign destinations.

It was pointed out that increased demand for storage facilities indicated a definite need for additional storage space, and upon completion the Docks will offer the most convenient, most economical facilities of this kind along the Gulf Coast. Such being the case, further increases in import cargo are expected.

FLORIDA

Jacksonville

Service to Manchester—McGiffin and Company, steamship agents at Jacksonville for more than 50 years, have announced the establishment of regular conference freight service from this port to Manchester, England by Manchester Liners, Ltd.

First loadings on the new service were aboard the British SS Manchester Shipper scheduled May 17.

This vessel was followed June 10 by the Manchester Progress; and will be followed July 21 by the Manchester Trader; August 19 by the Manchester Regiment (also loading for Liverpool) and September 22 by the Manchester Trader (also loading for Liverpool).

William H. Stillwell, Jr., traffic manager for the local agents, announced the vessels will load at the Atlantic Coast Line Export Terminal, Berth 21, served by the Atlantic Coast Line Railroad.

The "J. R. Willis," king of barges—

A 3,000-ton capacity barge, modern in every detail and certain to revolutionize the barge shipping industry along the Atlantic Coast, has been placed in service between Jacksonville and Trenton, N. J.

Hailed as the most modern barge afloat—anywhere—the unit has the appearance of a huge floating warehouse

from which cargo can be worked with a minimum of time and labor.

It is named the "J. R. Willis" after a Beaufort, N. C., shipbuilder whose sons have almost single-handedly restored coastwise general cargo service to its pre-war levels during the short space of four years.

The J. R. Willis is one-third the size of a football field. It measures 240 feet in length, 43 feet in beam and is 15 feet deep. The molded depth of the double-bottom hull is 11 feet 5 inches, but a high hatch combing adds to the capacity.

Gross tonnage of the barge is 1,900 tons. She has a cargo capacity of 2,500 tons at 10 foot draft and 3,000 tons at 12 foot draft. There are 150,000 cubic feet of cargo space with rolling hatches out to the side walls and the working hatch area broken only by occasional stringers.

Patented rolling hatches giving complete and easy access to all cargo from above make the J. R. Willis unique among barges operating along this coast. There is not a foot of space that cannot be worked with ease.

LOUISIANA

New Orleans

Port Develops Latin Trade—The director of the Latin-American Division of the Port of New Orleans, Rafael C. Goyeneche, will leave New Orleans June 4, 1955, returning on August 23rd, on another tour to "Middle America"—republics of Central America and Mexico—to stimulate more trade that means more money for Louisiana citizens.

Goyeneche plans to see principal exporters, importers and government officials in Panama, Costa Rica, Nicaragua, Honduras, El Salvador, Guatemala and Mexico (including Yucatan). His purpose, he stated, is to get these influential people to route more cargo via New Orleans.

Six years ago the Port of New Orleans established this Latin-American Division to increase commerce between the Port and our good neighbors to the South.

Port is first in bananas, cotton—New Orleans moved up from second position to first among U. S. ports in imports of

PORT ACTIVITY

several important commodities during 1954, W. J. Amoss, Director of the Port of New Orleans, has reported.

"At the end of every year," he said, "every port awaits the figures of the U. S. Department of Commerce to see how their record compares with others of the nation. Records for 1954 show Louisiana's Port of New Orleans moved ahead to first place in imports of bananas and first in exports of cotton and agricultural machinery. The Port of New Orleans continued to rank first for imports of sugar, molasses, burlap and sisal and in exports of wheat flour and soybeans as it has for some years."

Cotton exports boomed 53% at New Orleans, to 246,277 tons, compared with a national rise of 48%, according to the Commerce Department's report. "Cotton is king at New Orleans," Amoss said, "not only because it's our most valuable export item, but because the Port is back in its historical position as first U. S. cotton port." The export markets reached via the Port of New Orleans, he pointed out, mean more money for every Louisiana cotton grower. "Without these world markets for U. S. cotton," he said, "farmers throughout Louisiana and the South would have to plant fewer acres of cotton."

Agricultural machinery exports rose a healthy 23% above those of 1953, to 97,389 tons, the report showed. Corn exports, however, dropped 52% at New Orleans, compared with a national decline of 37%.

MARYLAND

Baltimore

Port ship arrivals high—The Baltimore Maritime Exchange monthly report of ship movements at the Port shows 428 ocean-going vessel arrivals during April. This traffic exceeded that in March by four, but was seven ships under the total for April last year, when, it will be remembered, the Port of New York was closed for a time due to labor difficulty.

Two hundred two of the vessels calling here last month were flying the American flag, while 226 displayed standards of foreign nations. Included in the latter were 43 Norwegian, 24 British, 23 German, 19 Liberian, 18 Danish, 13 Swedish, 11 Panamanian, 10 Honduran, 8 Dutch, 8 Japanese, 7 Greek, 4 Canadian, 4 Italian, 4 Venezuelan, 3 Belgian, 3 Cuban, 3 Philippine, 2 Brazilian, 2 Colombian, 2 Finnish, 2 French, 2 Israeli, 2 Spanish, 1 Argentine, 1 Chilean, 1 Chinese, 1 Costa Rican, 1 Irish, 1 Nicaraguan, 1 Portuguese, 1 Swiss and 1 Turkish.

Export coal volume soars—Export coal loadings at the Port of Baltimore last month increased 313 per cent over the

volume in the previous month and were more than 140 per cent ahead of loadings in April 1954, Bureau records disclose.

During April, local coal pier operators reported a total of 196,695 tons of coal were shipped abroad, the largest volume to move from the Port since January 1953. This compares with March exports of 47,539 tons and April 1954 shipments of 81,701 tons.

Augmented by the heavy April shipments, coal exported from the Port in the first four months of the year reached 344,958 tons in comparison with 206,543 tons in the corresponding period of 1954.

Port improvement loan approved—Contract for a loan of \$4,250,000 was signed on April 18 between the Western Maryland Railway and the Port of Baltimore Commission for the expansion and improvement of the railroad's marine facilities at Port Covington, ending more than four years of negotiations.

The railroad in 1950 had originally requested a loan of \$12,000,000 from the Port Development Commission, predecessor of the Port of Baltimore Commission, for improving their waterfront facilities here, which also incorporated plans for the construction of a new pier at their McComas Street Terminal. However, during the period of negotiation this figure was later revised downward due to changing traffic conditions, which officials of the company stated made the erection of the new facility economically unfeasible.

MISSISSIPPI

Bayou Casotte

Industrial harbor planned—The Board of Supervisors of Jackson County, Mississippi have recently retained the firm of Michael Baker, Jr., Inc., Consulting Engineers of Rochester, Pennsylvania and Jackson, Mississippi, to plan industrial harbor facilities at Bayou Casotte, adjacent to the City of Pascagoula, Mississippi.

The 1954 session of the Mississippi Legislature authorized a \$2,000,000 bond election for this project. The bonds were voted by the county in a recent election. Preliminary plans call for a thirty foot channel into Bayou Casotte from an existing channel about three miles out in the Gulf of Mexico.

The Jackson office of the Baker firm will handle the project.

NORTH CAROLINA

Morehead City

Increasing activity—The State Terminal at Morehead City has been the scene

of increasing activity. In addition to use of the docks by military ships and continued shipments of tobacco and fertilizer, a cargo of fish oil for Germany was shipped directly, for the first time, out of North Carolina through the terminals at Morehead City.

Petroleum and asphalt product tonnages are continuing to increase with a possibility of setting a new 1955 record at the port.

Savings resulting from larger imports of agricultural hardware through the State Docks at Wilmington are being passed on to the North Carolina farmer.

A representative of the Steel Products Supply Co. of Wilmington, reports that the firm's increased sales of imported hardware are at present being shipped via truck and rail to points in North Carolina, Tennessee, Kentucky, and Virginia, and that because of the many advantages in shipping through North Carolina ports, these cargoes are expected to increase even more.

Most of the imported hardware that goes to the agricultural industry is made up of the following items: wire fencing, barbed wire, nails, hinges, fence posts, and other farm hardware needs.

Wilmington

Marked tonnage increase—"Cargo tonnages through the North Carolina State Docks at Wilmington for the month of March exceeded the amount handled during the first six months of 1954," said Colonel Richard S. Marr, Executive Director of the State Ports Authority.

For the second time in one week recently the State Docks at Wilmington enjoyed capacity business. The modern wharf was filled with three ships, one loading North Carolina products, such as pine logs for Holland, woodpulp for England, Germany, and Belgium. Another ship was unloading a full cargo of Cal-Nitro. This fertilizer from West Germany arrived here for distribution to the agricultural industry of North and South Carolina and other bordering states. Down the wharf was a third ship loading scrap metals for export to Europe, much of which returns as agricultural hardware for use in the state.

Colonel Marr also said, "Since, over a year this is the first time that three commercial ships have been worked at the 1,500-foot wharf, and it is gratifying to have two such events happen in one week. From all sources of information, gathered from various industries now bringing cargoes through the docks, and from others who contemplate shipping through North Carolina ports, we can look forward to many more such busy shipping days at our North Carolina State Docks."

(Continued on next page)

PORT ACTIVITY

(Continued from preceding page)

SOUTH CAROLINA

Charleston

\$30 Million Port Expansion Advocated—Charles E. Daniel, head of the nationally-known Daniel Construction Company and former United States senator from South Carolina, has called for an investment of \$30 million in expanded facilities at the Port of Charleston.

Mr. Daniel, speaking before the Greenville, S. C. Chamber of Commerce, placed the port's future development at the head of a list of "musts" in a blueprint for the state's "forthcoming Golden Decade."

He put a \$2.5 billion price tag on what must be spent in the state during the 10-year period to keep up with South Carolina's industrial and population growth.

"One of the top 14 ports of the nation now with \$150 million worth of foreign trade a year," Mr. Daniel said, "Charleston could well be among the top six."

Service to Manchester, England, inaugurated—Manchester Liners, Ltd., a British shipping firm, has inaugurated a new, regularly scheduled service between the Port of Charleston and Manchester.

Service officially begins this month when the freighter Manchester Shipper loads and sails for the United States. She is expected in Charleston May 23. The second ship to take part in the new service will be the Manchester Trader which will arrive in mid-June.

Ships of the Manchester Liners, Ltd., have previously called at the port, but only to discharge cargo. The new service will also mark the first time Manchester ships have used facilities here for both loading and discharging cargo.

Manchester Liners, Ltd., is a member of the South Atlantic Steamship Conference operating to the United Kingdom. Furness, Withy & Co., Ltd., of New York is general agent. Charleston agent is Palmetto Shipping Co.

Auto Imports Increase—Increased importation of British-made automobiles has followed Charleston's inclusion in the Ford Motor Company's Warehouse Plan and the appointment of a Charleston car dealer as distributor by the Rootes Motor firm in England.

Orders are being received by Paul Motor Company, of Charleston, from an area including Knoxville, Tenn., and Jacksonville, Fla., for British-made Fords which are imported through Charleston and warehoused here for distribution.

The first consignment of Hillman cars ever routed to Charleston arrived at the port during April. Murdaugh Motors

Company of Charleston, newly-appointed Southeastern distributor, expects shipments monthly.

Wool imports for first year total \$16 million—More than 45,000 bales of wool, valued at approximately \$16 million, have been imported through the port of Charleston during the one-year period that the valuable cargo first began to be handled at the port, the South Carolina State Ports Authority has announced.

Marking the anniversary of the first year that Charleston became a port of entry for foreign wool, the American Pioneer Line freighter discharged the largest single shipment to arrive to date, some 7,500 bales of Australian wool.

Historically the wool industry has centered in New England with Boston as the main port of entry.

The first wool cargo to arrive at the Port of Charleston came from South Africa in April 1954 aboard the SS Robin Kirk. In the 12 months following, an ever-increasing amount of wool has been imported through Charleston from New Zealand, Australia and South America as well as from South Africa.

The first wool to arrive was placed in U. S. bonded storage here to await completion of the \$3 million wool combing plant of Nichols & Co. of Boston at Johnsonville, S. C., which is now in operation. Construction has since begun on a second plant, the Santee River Wool Combing Plant of Prouvost & Co., at Jamestown, S. C.

VIRGINIA

Transatlantic passenger-freight route urged for Chesapeake Bay area—The Virginia State Ports Authority has asked the Federal Maritime Administration to establish a transatlantic passenger-freight trade route between Chesapeake Bay ports and Europe.

The route, as visualized by David H. Clark, executive director of the Ports Authority, would stretch from Hampton Roads and Baltimore to the European ports of Southampton, England; a French channel port; Zeebrugge, Belgium; and Bremerhaven, Bremen and Hamburg, Germany.

Clark said the request was made "in the belief that such a route and operations thereon would better serve the commerce of the United States, the promotion and maintenance of an adequate United States Merchant Marine, as well as national defense, than the presently authorized combination passenger-cargo services, which are confined almost wholly to the port of New York."

One of the reasons calling for the establishment of a passenger-cargo service originating in the Chesapeake Bay area, Clark said, is the continuing shift of population and industry concentrations

to the South. Increasing competition in world trade, he said, is creating conditions where exporters and importers depend upon low marginal cost factors for their profit. By being able to utilize more economical transportation via Hampton Roads rather than New York, international traders can increase their margin of safety between profit and loss, he added.

In supporting his contention that there is an over-concentration of passenger-cargo services at New York, Clark pointed out that only the eastern half of Pennsylvania, all of New York and New Jersey and the New England States are "captive" to the Port of New York. "All the remainder of the United States is more naturally tributary, geographically and transportation-costwise, to Baltimore or Hampton Roads, or both, for passengers and cargo," he said.

Baltimore, he said, has a natural transportation-cost advantage under other North Atlantic ports in the area including the western half of Pennsylvania, northern Virginia and West Virginia, and approximately the eastern half of Ohio. In the western half of Ohio, southern Michigan, Indiana, Illinois and Wisconsin, Baltimore and Hampton Roads have an advantage in transportation costs under other North Atlantic ports.

"To the south of the Hampton Roads-Baltimore advantage area," Clark said, "Hampton Roads has the advantage in transportation costs as compared to other North Atlantic ports."

Cargo potential for the proposed new trade route, according to statistics presented with the petition, show that the three areas which can most economically use Hampton Roads and Baltimore contain 40.9 per cent of the country's manufacturing plants, more than 51 per cent of employees of the nation's production plants, 50.9 per cent of the salaries and wages paid by them, and 50.9 per cent of the value added by the manufacturers.

Passenger potential from the areas, according to another set of statistics, springs from a rapidly increasing concentration of population. The Hampton Roads-Baltimore areas, in the two decades from 1930 to 1950, had a population increase of 23,304,751 (25 per cent) while the New York area gained only 4,617,564 (15.6 per cent). It is from this growing area, Clark said, that both passenger and cargo divisions of the service would draw ample demand for its success.

A study made for the Ports Authority by Leo E. Archer, maritime traffic consultant of Arlington, Va., concerning passenger potential of the service, was highly favorable. Archer showed that 59 per cent of the passengers sailing to Europe in 1954 lived in the Hampton Roads-Baltimore areas, compared to 41 per cent in the New York area.

SOUTHERNERS AT WORK

Brown and Root Names Anderson As Vice President of Firm

M. P. (Pat) Anderson, chief engineer for Brown & Root, Inc., since 1946, has been made a vice president of the firm, according to an announcement by George R. Brown, executive vice president.

Mr. Anderson, a native of Alabama and a graduate of the University of Alabama, during the war years was chief engineer for Brown Shipbuilding Corporation in charge of design and construction of the shipbuilding facilities at the Brown shipyards which produced 350 fighting ships for the U. S. Navy. He first came with the Brown & Root organization in 1937 and he was chief engineer on the construction of Mansfield Dam on the Colorado above Austin.

As chief engineer, Mr. Anderson has had overall responsibility for the company's entire design and construction engineering activities and heads a force of over 300 permanent engineers.

Thomas Industries Names Three Vice Presidents

Following the most successful sales year in the company's history, three key members of the executive staff of Thomas Industries, Inc., Louisville, Kentucky, have been appointed vice presidents while two others have been elevated to treasurer and assistant treasurer, respectively.

Announcement of this action taken by the company's Board of Directors was made by Lee B. Thomas, president of Thomas Industries, Inc., manufacturer of residential lighting fixtures, paint-spraying equipment, and power saws.

Named new vice presidents of the company were: R. W. Minett, Jr., former general sales manager, who was recently appointed to the newly-created position of Director of Merchandising for Thomas Industries; William L. Tierney, manager of the Contracts and Special Accounts Division, and Robert W. Krogstad, engineer in charge of technical administration and research.

Frank C. Doyle was elected treasurer, an office formerly held by R. D. Burns, executive vice president. The division of assignments was made necessary as a result of greatly increased duties brought about by the company's expansion program, Mr. Thomas said. Mr. Doyle will continue as assistant secretary.

Atlanta Section of ASME Elects New Officers

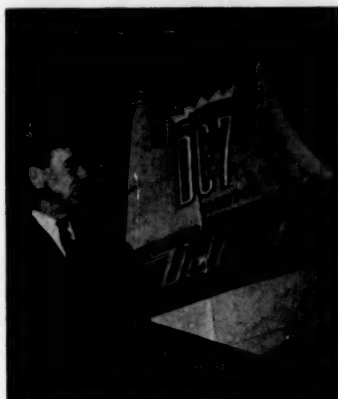
W. J. (Bill) McAlpin of Atlanta, president of the J. J. Finnigan Company, Inc., one of the South's oldest fabricators of

boiler plate, has been elected chairman of the Atlanta Section of the American Society of Mechanical Engineers for the year beginning July 1.

Elected to serve with him are William V. Bishop, vice-president of Evans L. Shuff and Associates, branch vice-chairman, and Thomas W. Waldrop, district manager of Republic Flow Meter Company, secretary.

Woolman Completes 30 Years As Head of Delta C&S Airline

C. E. Woolman, veteran American air transport official who built a small crop dusting company into the nation's fifth



C. E. Woolman
President

largest airline, last month completed 30 years as general manager of Delta.

The President and General Manager of Delta-C&S Air Lines organized the firm in 1925 at Monroe, Louisiana. He conceived the idea of spraying crops from the air while an Agricultural Extension Agent with Louisiana State University. The techniques which he and his associates developed were so successful that the company soon expanded its operations to Mexico and South America.

In 1927, Woolman became the first international airline operator along the West Coast of South America. The route was sold later and became the nucleus of the present Panagra System.

Delta pioneered its routes across the South in 1929, when it began scheduled passenger service between Dallas and Atlanta. Since that time, the airline's routes have grown to a 10,000 mile system serving 55 cities in the U. S. and six Caribbean countries. Chicago and Southern merged with Delta in 1953 to form the present system.

Alexander Smith Names Barksdale Director of Public Relations

William E. Barksdale, executive director of the Agricultural and Industrial Board since 1946, has resigned to accept a position as director of public relations for Alexander Smith, Incorporated, nationally known manufacturer of carpets.

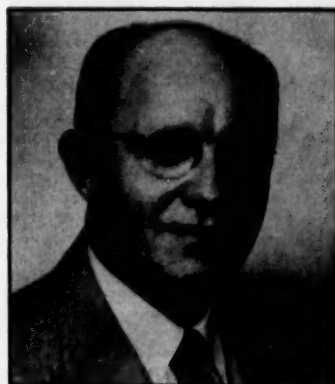
Mr. Barksdale, who has guided the work of the aggressive board under three governors, assumes his new duties on May 1st. He will make his headquarters in Greenville, according to James M. Elliott, president of the firm which also operates plants in Liberty, South Carolina; Brockton, Massachusetts, and Philadelphia, Pennsylvania.

Mr. Barksdale was appointed director of the promotion agency in June, 1946, by the late Governor Thomas L. Bailey. For two years prior to that time he had served as the executive assistant to the Governor.

He will have complete charge of public relations for the four plants of Alexander Smith which manufacture nationally known quality rugs and carpets featuring Axminsters, Velvets and Wiltons. Headquarters for the plants was recently shifted from Yonkers, New York, to Greenville.

Hemminghaus Now Chemstrand Vice President of Production

Roy G. Hemminghaus has been promoted, effective immediately, to the newly created position of vice president in charge of production for The Chem-



Roy G. Hemminghaus

strand Corporation, Henry H. Bitler, president, announced recently.

In his new position, Mr. Hemminghaus will be in charge of operations at both the Chemstrand nylon plant at Pensa-

(Continued on next page)

Southerners

(Continued from page 43)

cola, Florida, and the Acrilan acrylic fiber plant at Decatur. He formerly was vice president and manager of the nylon plant. Mr. Hemminghaus will be located at the corporation's headquarters in Decatur.

Mr. F. William Koster is vice president and manager of the Decatur Acrilan plant. At Pensacola, Mr. Fred G. Gronemeyer, former assistant plant manager, was promoted to manager of the nylon plant, succeeding Mr. Hemminghaus. Mr. Louis E. Dequine, Jr., who was plant engineer, will succeed Mr. Gronemeyer as assistant plant manager.

Mr. Hemminghaus joined Chemstrand in December, 1950, and prior to that period he completed 20 years of service with Monsanto Chemical Company.

Mr. Gronemeyer was employed by Chemstrand in May, 1951, after 22 years of service with Monsanto.

Both are natives of St. Louis.

Frisco Railway Appoints Beshears Director of Labor Relations

J. K. Beshears, former division superintendent of the Frisco Railway, was



J. K. Beshears

named director of labor relations for the entire Frisco System by President Clark Hungerford.

Beshears' appointment became effective June 1, and his headquarters will be in St. Louis. He will be in charge of all matters relative to Frisco's labor relations and negotiations and will be the highest officer of the company to handle labor contracts, Hungerford said.

Tennessee Gas Range Firm Names McGee to Head Research

Earl A. McGee, former head of the range test section of the American Gas Association Laboratories at Cleveland, Tennessee, has joined Dixie Products, Inc., of Cleveland, Tennessee, manufacturer of gas and electric ranges, as head of the research, development and quality control departments.

Mr. McGee is well known throughout the American gas industry as the result of his nine years with the American Gas Association. In addition to heading the range test section, he was liaison agent between the testing department of the laboratories and gas range manufacturers' representatives.

A physicist, Mr. McGee received his B. S. in physics from Baldwin-Wallace College, Berea, Ohio, in 1943.

Guillory Named Vice President New Orleans Public Service, Inc.

The Board of Directors of New Orleans Public Service, Inc., have elected J. Mason Guillory, Director of Advertising, as



J. Mason Guillory

a Vice President of the Company, it was announced by President George S. Dinwiddie.

Mr. Guillory, who has been with Public Service since 1931, was educated in the public schools of New Orleans, and at Tulane University where he received a degree in mechanical and electrical engineering in 1928.

Prior to his coming to Public Service, he served as power engineer in oil refineries. His work with New Orleans Public Service, Inc., included assignments in all phases of its commercial and industrial sales operations. He was manager of the Industrial and Commercial Sales Division from 1942 until 1952, when he became Director of Advertising.

Mr. Guillory has actively participated in the work of engineering and utility industry organizations. He has been chairman of committees of the Edison Electric Institute, Southeastern Electric Exchange, and Southern Gas Association.

In 1952 he headed the Sales Executives Council of the Chamber of Commerce of the New Orleans area, working to further the Council's objective of advancement of the sales profession.

Olin Mathieson Names Verdery As Eastern District Sales Head

A. B. Verdery has been appointed Eastern District Sales Manager of Olin Mathieson Chemical Corporation's Eastern Fertilizer Division, John Nason, division general manager, announced recently. His headquarters will be in Baltimore.

A graduate of Clemson College, Clemson, South Carolina, Mr. Verdery has a broad background of agricultural chemical sales experience and from 1950 to 1953 was president of his own company, the Augusta Fertilizer Company, Augusta, Ga.

Missouri State Chamber Names Tapperson as Director

Reuben Tapperson of St. Louis has been appointed legislative director for the State Chamber of Commerce. He was the field director and legislative representative for the Associated Industries of Missouri for 17 years.

Tapperson is well known for earlier recreation work for St. Louis and initiated the Golden Gloves in the state for the St. Louis *Globe-Democrat*.

Missouri Development Groups Elect New Top Officers

P. E. Jepson has been re-elected president of the Macon Industrial Development Corp. Other officers: O. J. Lamb, vice-president and Tom Briggs as secretary-treasurer.

The Carthage Industrial Development Corp. has chosen Walter Schlecht as president, H. H. McCune, vice-president and Rex Carter, secretary-treasurer.

Harry Roberts, a vice-president of Empire District Electric Co., has been named to head the Joplin Chamber of Commerce industrial development committee.

Texas Mortgage Bankers Group Elects Austin President

John F. Austin, Jr., of Austin, was elected president of the Texas Mortgage Bankers Association at the 39th annual convention held recently in Galveston. He succeeded G. Robert Swantner of Corpus Christi.

Mr. Austin was one of two Houstonians signally honored at the convention. Houston's Everett Mattson won the J. E. Foster Award as the Texas mortgage banker who made the most outstanding contribution to the work of the association during the past year.

The Foster Award is an annual feature of the convention. It consists of a plaque and watch donated by J. E. Foster & Son, Inc., of Fort Worth in honor of the founder of the firm, J. E. Foster, Sr.

Ames L. Gill of San Antonio was elected vice-president of the organization and J. DuVal West of Dallas was reelected secretary-treasurer.

Houston Electro-Technical Lab Elects Hall Executive V. P.

Ernest M. Hall, Jr., has been named executive vice president of Electro-Technical Laboratories, Inc., Houston. In his new post he will handle sales and engineering activities of the company.

Mr. Hall was formerly connected with Associated Instruments, Houston.

Southerners

Reynolds Metals Elects Three Vice-Presidents

The board of directors of Reynolds Metals Company elected three vice-presidents at a recent meeting. C. E. Coghill, Treasurer of the company, was made Vice-President and Treasurer. John Krey, Assistant to the President, was made Vice-President. W. Monroe Wells, Assistant Vice-President of Operations, was made Vice-President.

Mr. Coghill was born in Roanoke, Virginia, March 4, 1906. He attended John Marshall High School and Virginia Mechanics Institute. He joined the accounting firm of Ernst and Ernst, from which he came to Reynolds in November 1939. He was appointed Assistant Controller in July 1943, Assistant Treasurer in May 1944 and Treasurer in 1948.

Mr. Krey was born in Boston, in 1901. For more than 25 years, he was associated with various investment banking firms in New York City as an officer in an investment management firm and a partner in a stock exchange company. In 1941, Mr. Krey became associated with Reynolds Metals Company as Assistant Treasurer. When Mr. Reynolds became President of the company in 1948, Mr. Krey was made Assistant to the President, which position he has held up until the present time.

Mr. Wells was born in Maryville, Tennessee, April 12, 1903. He was educated in Maryville city schools. After approximately 28 years in the aluminum industry, in which he started as an office boy, he joined Reynolds Metals Company April 23, 1946, as Production Control Manager of the McCook aluminum sheet plant in Illinois. He was transferred to Richmond September 1, 1950, as General Production Control Manager for Reynolds Metals Company. He was elected assistant Vice-President August 14, 1953, and designated as Assistant Vice-President of Operations by J. Louis Reynolds, Vice-President in Charge of Operations. In October, 1954, Mr. Wells was made a Vice-President of Reynolds Reduction Company, a wholly owned subsidiary of Reynolds Metals.

Tashjian Engineering Manager For Westinghouse Electronic Div.

Two top level appointments in the engineering organization of Westinghouse Electric Corporation's electronics division were announced by Walter E. Benoit, division manager.

D. R. Tashjian becomes manager of engineering for the electronics division. He succeeds F. S. Mabry who was named to the newly-created post of engineering consultant to the division manager.

Mr. Tashjian, who prior to his present promotion was manager of the division's government engineering department, is a native of Kalamazoo, Michigan. He re-

ceived his bachelor of science degree in 1932 from the University of Michigan, following this with degrees in science and arts from Massachusetts Institute of Technology and Western Michigan College of Education, respectively.

Mr. Mabry, who is a native of Laurel Fork, Virginia, has spent his entire career with Westinghouse, joining the company as a coil winder at the East Pittsburgh works in 1922.

Robinson Now General Manager Of Carolina Power and Light

Directors of Carolina Power & Light Company designated H. Burton Robinson, for twelve years vice president in charge of the operating and engineering department, as the company's general manager.

The title of general manager was shifted to Robinson from Louis V. Sutton, who will continue as president and chairman of the board. Sutton has been CP&L's president and general manager since 1933, when he succeeded the late Paul Tillery.

At the annual stockholders' meeting, all directors were unanimously re-elected. The directors re-elected all other officers.

A native of Columbia, S. C., where his father was a distinguished attorney, Robinson studied engineering at Clemson College and at N. C. State College, where he won his B. S. degree in 1922. He studied two years at Massachusetts Institute of Technology before taking his first power job—with Brooklyn (N. Y.) Edison Co.

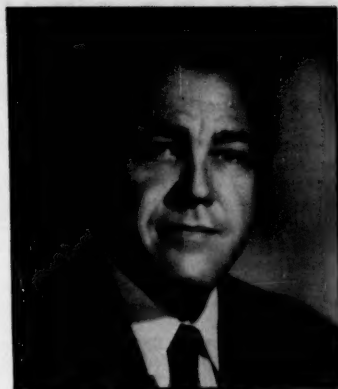
He has been associated with CP&L since 1925 except for a five-year period (1927 to 1932) with Electric Bond and Share. Working his way up through the ranks, he became vice president in charge of operations and engineering in 1943. He has supervised the expenditure of more than \$200,000,000 for expanded power facilities in CP&L. He became a director of CP&L in 1953.

International Paper Names Assistant Auditor of Firm

John T. Peninger has been appointed Assistant to the Auditor of International Paper Company, it was announced by H. F. LaMarche, Auditor.

A veteran of more than 20 years with International Paper, Mr. Peninger joined the company's Wood Accounting Department at the Bastrop, Louisiana, Mill in 1932. After serving in the Southern Kraft Division auditing office in Mobile, he was appointed Southern Woodlands Agent in 1946 and later served as Mill Agent at the company's Natchez, Mississippi, and Springhill, Louisiana, mills. In December, 1954, he was named Division Manager of Auditing at Mobile.

Mr. Peninger studied business administration at Louisiana College and Chilli-cothe College. He is a member of the National Association of Cost Accountants.



Corpus Christi's Port Director Byrd Harris says the Port of Corpus Christi will be one of the finest in the Nation when improvements now getting under way are completed. They include construction of two new bridges over the Channel, extensive widening and deepening and a 4-mile westward extension of the Channel.

Lincoln Engineering Co. Appoints Two Vice Presidents

Lincoln Engineering Company, St. Louis, nationally known manufacturer of Lubricating Equipment, recently announced the appointment of Carl H. Mueller as Vice President in Charge of Engineering, and John E. Renner as Vice President in Charge of Sales. Both men have been associated with the company for twenty years.

American Potash Names Deck To Manage New Texas Plant

George T. Deck, technical director at American Potash & Chemical Corporation's main plant at Trona, Calif., has been named plant manager of the new American Lithium Chemicals, Inc., \$6,600,000 plant near San Antonio, Texas.

Announcement of the appointment was made by Parker S. Dunn, American Potash & Chemical Corporation vice president in charge of production.

American Lithium Chemicals, Inc., is a newly-formed company owned by American Potash & Chemical Corporation and Bikita Minerals (Private) Ltd., to manufacture lithium chemicals from lepidolite deposits in Southern Rhodesia, Africa.

Black Named General Manager For Reynolds Reduction Division

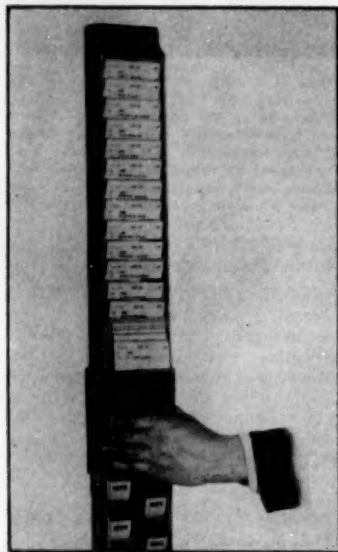
James C. Black, general manager of the eastern reduction division of Reynolds Metals Company, has been appointed general manager of the company's reduction division. The announcement was made by J. Louis Reynolds, Vice-President in Charge of Operations.

Mr. Black, who has been living at Hot Springs, Arkansas, will make his headquarters in Richmond. He will have charge of the company's six aluminum reduction plants at Jones Mills and Arkadelphia, Arkansas; Troutdale, Oregon; Longview, Washington; Listerhill, Alabama, and Corpus Christi, Texas.

NEW PRODUCTS

Automatic Card Rack

Department of Information, International Business Machines Corp., 590 Madison Ave., New York 22, N. Y.—A unique new Automatic Card Rack that eliminates the tedium of individually collecting time cards has been introduced by International Business Machines Corporation. It automatically collects, in sequence, all cards in the rack by sliding



Collects in sequence automatically.

the card collector upward, a simple, one-hand operation. The card collector can be locked in a static position at the base of the rack to prevent its unauthorized use.

Molded of high impact Styrene plastic, the new rack provides widely spaced card pockets with offset identification tabs for ease of card location. Tabs with odd numbers are located on one side of the rack and even numbers on the other. Finger apertures in each card pocket facilitate the removal of individual cards. Space is provided for identifying the racks with IN or OUT indicators in order that attendance status can be quickly determined.

Semi-Direct Line Lighting

Sylvania Electric Products Inc., 1740 Broadway, New York 19, N. Y.—Designed to meet the growing trend toward greater upward light components in high-quality industrial lighting applications, a new series of fluorescent fixtures known as the Semi-Direct line has been announced by the company.

The new fixtures are designed for use wherever seeing tasks are critical and

for general illumination in industry where good lighting is particularly important, according to Thomas G. Hearn, sales manager of Sylvania's lighting fixture department. The Semi-Direct line provides for a minimum efficiency of 82% and an upward light component of approximately 25%, according to Mr. Hearn.

Food Packaging Unit

Thermatic Container Corporation of Maryland.—A revolutionary food packaging unit has been patented by the new firm. Initially designed for both military and civil defense use in feeding men in large groups, small detachments, with a minimum of weight and cubage, the container nevertheless offers excellent opportunities for commercial application.

The unit embodies an economical and effective packaging of all types of foods with the outstanding feature of a closure of maximum convenience without the need of a key or a can opening device.

It is the firm's belief that sportsmen and housewives, as well as military troops, will appreciate this sure cure for cut fingers and sore thumbs. Capable of being fabricated of either tinplate or certain plastics, depending upon the purpose and the content items, the container is adaptable to standard canning methods and production requirements.

Portable Range Indicator

Schaevitz Engineering, Camden 1, N. J.—A new, portable, high speed, self-contained indicator that gives a quick and accurate indication of pressure, temperature, force and displacement by means of pick-ups using the output of 60 cycle linear variable differential transformers has recently been developed by the firm. The device, called the "Type DK Indicator," contains a Schaevitz LVDT, the output of which is balanced against that of an external LVDT. The unit will give a full scale indication of output for as little as 0.005" travel in the external sensing LVDT.

The core of the internal balance transformer is positioned by a cam driven by a servo motor in response to the balance amplifier. A pointer indicates the position of the cam and hence the amount of travel in the external transformer. A 7" diameter dial on the face of the indicator has 200 divisions and is calibrated from 0 - 100 over 300° of rotation.

Other dials with special calibrations can be provided. All controls are accessible from the outside of the case, eliminating the need for dismantling except for servicing. The DK Indicator contains a two position rotary switch on the front of the case to vary the high range sensitivity automatically by a preset amount and a calibration switch is also

provided on the front to check the indicator zero at any time without interrupting the process being checked.

Time-Program Cycle-Controller

The Bristol Co., Waterbury, Conn.—An instrument which combines in a compact two-case unit a two-pen, two-cam time-program controller with a cycle controller which times up to eight operations has just been announced by the company. The cases can be mounted side by side or one above the other to suit particular space requirements. The time-program controller can be used to control two variables such as temperature, humidity, pressure, or vacuum through any predetermined program of values by means of an aluminum cam cut to the proper shape.

Each of the two cams is individually cut, and locked together in any desired time relationship to each other on a single hub. In this way, temperature can be controlled through one cycle of changing values while pressure is going through another cycle independently, but synchronized with the temperature. The two cams can be changed as a unit in a matter of seconds, altering the program performed to meet varying requirements. The program controllers are available in on-off or proportional electric control, or pneumatic control in proportional, reset, or derivative modes.

Fast Start-Stop Tape Transport

Brush Electronics Co., 3405 Perkins Ave., Cleveland 14, Ill.—A highspeed, fast start-stop tape transport suitable for use as an auxiliary memory storage device in computers or data reduction systems has been developed and is being manufactured by the company.

Called the Datacord, this new magnetic recorder-reproducer can be mounted on a 19-inch relay rack. The unit has a tape speed of 75 inches per second in either direction.

To insure utmost accuracy in its operation, the Datacord was built so that the starting and stopping time of the tape is in the order of four milliseconds. It will accommodate tapes varying in widths from one-quarter inch to two inches.

In order to insure the fast starting and stopping, the Brush engineers designed the Datacord so that there would be an absolute minimum of effort in overcoming the inertia of the moving parts. To help accomplish this, the tape is stored in one basket and during operation is dropped into another basket. In this way, it is necessary to accelerate only the mass of tape which is suspended by the capstan.

Self-Propelled Revolving Crane

R. G. LeTourneau, Inc., Longview, Texas.—An illustrated, two-color folder describing a radically new self-propelled diesel-electric revolving crane was issued recently by the company.

One innovation shown is electrically-powered outriggers which are set and retracted from within the operator's cab, greatly facilitating spot-to-spot loading jobs.

Another feature discussed is self-propulsion through individually-powered electric wheels, making the unit particularly useful in off-road operation. One illustration shows how an owner has used the unit to unload cargo from a dock, transport it on a self-contained load-carrying platform across loose beach sand, and then reload the cargo onto trucks.

Chrome Spray Control

Smoothex, Inc., Cleveland, Ohio.—Plating plants and manufacturers of parts, who operate their own plating departments, can now control chrome spray by dropping a few Smoothex Anti-Fume pellets into their plating baths.

The Anti-Fume Pellets, just announced by Lloyd Portzer, president of the company, will not only reduce plating cost, but also protect the health of plating-room workers.

Determination of the number of pellet additives to be placed into a plating bath for an initial charge is made simple. Since each pellet weighs exactly one-ounce, the operator need only count out 72 pellets to make up a four-pound charge for a 100 gallon tank. Thus, no weighing of the Anti-Fume pellets is necessary.

Each pellet tends to keep the chromic acid in the bath preventing the escape of fumes, spray and dragout. The pellets will not break down under normal plating operation according to the firm. They are so stable that once a tank is charged, the occasional addition of a few pellets, in the bath, is all that is necessary to maintain reduced surface tension.

Fortisan-36 Industrial Fiber

Celanese Corporation of America, Textile Division, Charlotte, N. C.—A technical bulletin on Fortisan-36, the new industrial fiber of the Textile Division of Celanese Corporation of America, is currently being distributed. Designated as TD-20, the bulletin uses text, charts and diagrams to present information on the technical properties and characteristics of the yarn as well as recommendations for its processing.

Fortisan-36, which has a tenacity in excess of 8 grams per denier and a high modulus of elasticity, is expected to find its first applications in the mechanical rubber goods industry for V-belts, conveyor belts, high pressure hose and fire hose. It is also being evaluated for a number of other uses.

Copper-like Porcelain Finish

Pemco Corp., Baltimore, Md.—A new finish for steel products that has the beauty and warmth of copper plus the durability of porcelain enamel has been developed by Pemco Corporation, Balti-

more, Maryland makers of porcelain enamel frit. Called "Coppertan," the copper-like finish was perfected in cooperation with **Samuel Stamping & Enameling Company of Chattanooga, Tennessee** which is using the finish on its built-in kitchen ranges and upright gas ranges.

Other products for which the new finish is designed include: appliances for the home, air conditioners, cooking utensils, commercial refrigeration equipment, garbage disposals, dishwashers, gas space heaters, gas stoves, electric ranges, heating equipment, metal kitchen cabinets, portable grills, soda fountains, sinks and others.

Vibration Isolator

Barry Controls Inc., Watertown, Mass.

—Production of a revolutionary vibration isolator which works at any angle of mounting with high damping in all directions was announced. The new All-Angl mount of Barry Controls is designed essentially for operation under conditions of violent maneuvering, high steady state acceleration, and punishing vibrations at all frequencies imposed by modern jets and missiles.

The All-Angl's unique internal construction which permits loading in any mounting position, even horizontal and inverted, consists of seven principal parts. Two conical steel springs support the load; a split nylon washer between two steel washers provides vertical and lateral friction damping; two molded nylon spring seats also serve as top and bottom snubbing washers.

Low transmissibility of the new isolator at the resonant frequency is gained by the mount's effective friction damping properties. As a result, at the worst condition of resonant frequency mounted equipment will be subjected to less than 300 percent of the carrier's vibration. Under MIL-C-172B specifications 500 percent is permissible.

Conveyor Traffic Controller

The Rapids-Standard Company, Inc., Grand Rapids, Mich.—A new Rapistan

Traffic Controller that regulates the flow of goods from two merging conveyors and eliminates jamming at the point of intersection is now available from the firm. It will handle a wide range of container types and sizes, and can be used with either belt or live-roller type conveyors.

The new Traffic Controller is ordinarily mounted between two converging conveyors with a steel arm extending across each unit. An article moving on one conveyor sweeps back the arm on that side, setting a mechanical interlock that prevents movement of goods on the other line. When the first line is clear the arm swings back, allowing goods on the second line to flow to the junction point.

NEW PRODUCTS

One Mast Lift Truck

Hyster Co., 2902 N. E. Clackamas St., Portland 8, Ore.—An entirely new concept in lift truck engineering, the Hyster Monomast, a revolutionary design consisting of one mast, will be introduced nationally during July, according to an announcement made public May 25 by Officers of the Hyster Company. Disclosed as one of the industry's greatest basic advancements, according to the firm, the Hyster Monomast creates exclusive panoramic visibility never before possible with conventional upright



"Monomast" telescoping lift truck.

assemblies. The Monomast engineering consists of two box-type sections, one telescoping within the other.

Thousands of hours of job and Hyster proving ground tests indicate the Monomast design will work faster than comparable conventional units. The new unit allows the operator a clear, unobstructed view to both forks and load, permitting faster operating speed and reducing driver fatigue. Additional operating advantages claimed are faster maneuverability, faster approach, more accurate load placing and safer load handling.

Hydraulic Truck Leveler

Rotary Lift Co., 1054 Kansas, Memphis, Tenn.—A device which will save dock space and help attain fastest loading and unloading of highway carriers is now being manufactured by the firm.

Called the Rotary Truck Leveler, it is designed to raise or lower the entire rear section of any truck or trailer to bring the bed on a level with the loading dock.

Thus leveled, pallet or fork trucks can move from dock to trailer bed with maximum speed and safety and without using ramps or dockboards. The angle of incline between dock and bed is reduced to a minimum, eliminating the problem of low-underclearance pallet trucks

(Continued on next page)

NEW PRODUCTS

(Continued from page 47)

"hanging up" on sharply inclining ramps. There are no dock obstructions to restrict traffic flow.

Lightweight Masking Machine

Permacel Tape Corp., New Brunswick, N. J.—A new lightweight portable masking machine, the most inexpensive on the market, is now available the firm announced.

Designed for both two and three tone masking and general masking of automobiles, busses and trucks, the new Permacel 6 Masker, which measures 13" x 9" x 8½", will greatly facilitate painting in terms of ease, speed and cost. It has special application in such industries as aviation, furniture, marine, television, radio, painting, interior decorating and a wide range of additional fields.

The new masker, which weighs 7½ lbs. without tape or paper, has undergone extensive field tests. It is described by finishing and refinishing authorities as one of the greatest aids in masking operations. Complete with convenient hand hole for carrying and four rubber feet, it can be used on bench and work table without fastening, the firm states.

Compressed Air Transfer Mask

Acme Protection Equipment, 1201 Kalamazoo St., South Haven, Mich.—To meet the need for continuous respiratory protection in movement from one plant air connection to another, Acme Protection Equipment Company, South Haven, Michigan, has just announced its new Acme Full-Vision Transfer Mask.

According to G. M. Glidden, general manager, this new equipment uses compressed air when wearer is connected to



Transfer Mask.

such supply, and, with no action on his part, transfers to the canister for protection if (1) the compressed air supply is shut off; (2) the hose is cut or kinked; or (3) wearer wants to move to another location or compressed air plug-in station.

This performance is made possible, it is stated, by the use of a combination of

standard valve in the canister and synchronized "T" valve connected at the junction of face piece and hoses. Full details may be obtained from Acme Protection Equipment Company, 1201 Kalamazoo Street, South Haven, Michigan.

Midget Thermostats

Fenwal Inc., Ashland, Mass.—A new line of midget thermostats, ¼ in. in diameter and less than 2½ in. long, has been developed by the company. They weigh approximately 1 oz. The thermostat is designed for precise temperature control or heat detection applications in heated equipment, bearings, pumps, etc., wherever installation space is at a premium.

The midget Thermo-switch may be set to actuate at any specified temperature between -50 to 500 F. Contacts open when the temperature exceeds this set point; inverse action models are also available in which the contacts close about set point temperature.

The new midget Thermo-switch unit is available in a variety of head styles to meet various mounting requirements. These are: a basic cartridge-style unit for insertion into cylindrical cavity; two screw-in models with hexagonal heads for threading into ¼ and ⅜ in. bushings or tapped holes; and a flange head unit for surface mounting.

Self-propelled Power Jack

A self-propelled hydraulic power jack has been developed by the **Corps of Engineers' Research and Development Laboratories, Fort Belvoir, Va.**, and the **Kershaw Manufacturing Company of Montgomery, Alabama**, to speed-up surfacing of railroad tracks.

Propelled by a hydraulic motor with a two-speed transmission, the unit has a working speed of 3 miles per hour and can travel at speeds as high as 12 miles an hour. It has rail "dogs" which operate automatically on any size track as the foot is lowered between ties.

One man can operate the unit, which is equipped with a special turntable to permit its removal from the track in less than two minutes.

The unit is one of several items under development and test at the Laboratories to accelerate the construction and repair of military railroads. Others are a maintenance car, a track shifter, a ballast tamper, a rail cutter and a hydraulic rail bender.

One Hp. Pressure Switch

Furnas Electric Co., 1033 McKee St., Batavia, Ill.—New Style "S" pressure switch designed for water systems, low pressure air compressors, paint sprayers and similar applications requiring 1 hp. or less.

Small enough to fit in the palm of your hand, this switch has a capacity up to 65 pounds per square inch. Normal pressure settings are 20-40 pounds, the standard for home water systems.

Construction features of the Series "S" pressure switches include: three types of enclosures, adjustable pressure settings, ample wiring room, recessed terminal connectors, corrosion resistant parts; and positive snap action. The switch mechanism generates an initial contact pressure five times that of the control spring alone.

Overload Protective Coupling

Machine Accessories, Dept. M158, 6 E. Franklin Ave., Minneapolis 4, Minn.—A new overload protective coupling called Tork-O-Stat, whose use safeguards against costly breakdowns of machines and machinery with loss of production time and expensive material damage, is announced by the manufacturer. This device is used between any drive shaft and a driven shaft, giving positive low cost instant protection against overloads and sudden jams.

When the torque rating of the Tork-O-Stat is exceeded, internal parts are disengaged and a complete disconnect results. When the overload or cause of jamming is removed, the Tork-O-Stat will re-engage and normal drive is resumed automatically. Being an extremely low cost self-contained unit, the Tork-O-Stat can be close-coupled, easily installed, is small in size (only 4¼" dia. by 1-5/16" thick overall), light weight (½ pound), needs no lubrication, is tamperproof, needs no safety guard and is pleasing in appearance for external design uses, the company states.

Emergency Lighting Battery

Exide Industrial Division, Dept. EL-686, Box 8109, Philadelphia 1, Pa.—Approval by Underwriters Laboratories, Inc., of the first storage battery designed specifically for emergency lighting has been received by the company, a division of The Electric Storage Battery Company.

The firm also believes its 3-COE-7 Tytex unit is the first plastic-cased battery to be approved by UL. Previously, UL accepted storage batteries only if encased in glass or opaque vulcanized rubber.

Eight to twelve years of useful life is anticipated for the 3-COE-7, according to Exide. Quarter-inch thick pasted type positive plates and active material of special formulation contribute substantially to this extraordinary long life.

Monel Pickling Drums

Monel metal perforated by the **Hendrick Manufacturing Company of Carbondale, Pa.**, and fabricated into lightweight pickling drums by **Youngstown Welding and Engineering Company** is enabling Wheeling Steel to degrease and pickle 6,000 pounds of couplings an hour.

The drums are chute loaded, picked up and passed through a pickling bath of 12% sulphuric at 160°-180° F. and then to successive washes. Because the drums are subjected to severe shock during materials handling and corrosion during the pickling and wash baths, it was of prime importance that they be fabricated of perforated Monel.

Bronze Globe Valve

The Lunkenheimer Co., Box 360, Cincinnati 14, Ohio.—A revolutionary new bronze globe valve—the LQ600—radically different in design and engineering, has been introduced by the firm.

The announcement follows a four-year testing program in which the new valve set such remarkable performance records that it may make all other types of bronze valves for throttling service obsolete, the firm states.

Dozens of leading companies cooperated in the tests, installing LQ600 valves on their most difficult "problem installations." In many of these services, other valves lasted only three or four months, on the average. In some, the service life of ordinary bronze valves ranged up to four, six, and eight months before failure. But during the entire four-year testing program, the LQ600 valve has never failed or leaked—even in installations where other valves had been replaced regularly from month to month.

This amazing performance record is made possible by a combination of two radically new elements. The first is a new seating metal, patented by Lunkenheimer under the name, "Brinalloy." This new alloy is not surface-hardened, but hard all the way through. It resists wear and corrosion even more than 500 Brinell Stainless Steel and far more than case-hardened stainless steel exceeding 1000 Brinell.

The second element is the flat-seat design of the valve. Engineers have long considered flat-seat designs impractical for throttling service, because ordinary seating materials failed rapidly by wire-drawing. Brinalloy, however, is so resistant to wear and corrosion that it can be fused permanently into the valve for its entire service life. The Brinalloy seats and discs in the LQ600 valve do not require replacement, renewing, or regrounding, the company claims.

Rivetless Conveyor Chains

U. S. Engineering Company 14561 Lesure Ave., Detroit 27, Mich., has developed a new series of drop-forged rivetless chains for overhead conveyor use. The new chains are dimensionally interchangeable with other makes.

Outstanding features of the company's conveyor chains are dry lubricant impregnated pins and machined bearing surfaces of both inner and outer links. According to the manufacturer this eliminates the need for surface lubrication, reduces the coefficient of friction by 75% and decreases chain pull. Perma-

ment, dry lubrication cuts maintenance costs, avoids lubricant drippage on conveyed parts and permits operation in temperatures ranging from 30 deg. below zero to 800 deg. F. It also reduces the tendency of dirt and dust to create an abrasive action in the chain joints.

Plastisol Metal Coatings

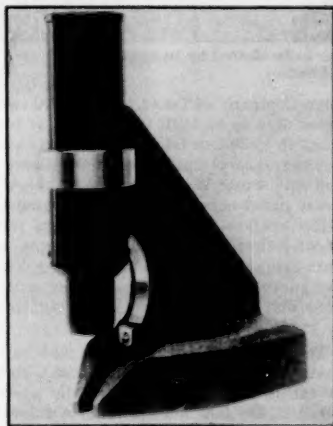
Dennis Chemical Company, St. Louis, Missouri.—Has introduced a new series of Denflex Plastisol Metal Coatings, the success of which is attributed to a one-coat primer which tightly bonds the plastisols to metal surfaces such as steel, copper, brass, aluminum or galvanized iron.

The primer, Denflex No. 2386, may be applied by brushing, dipping, roller coating or spraying. After an air dry of 15 to 20 minutes on most surfaces the specially formulated plastisol finish may be applied and baked.

Precision Punch Marker

The Moran Instrument Corporation, 170 East Orange Grove Avenue, Pasadena 3, California, announces a new instrument for layout work. The Moran Micro-Punch will mark any flat surface for precision drilling. It is particularly useful for prick-punching the intersections of scribed height gauge lines and for marking photo-etched templates as used in printed circuitry.

The Micro-Punch combines, according to the manufacturer, a high quality microscope with a precision automatic center punch. The center punch is operated by a balanced trigger mechanism which



Will mark any flat surface for precision drilling.

releases a spring action hammer. The punch mark is made by an indenter point set in the base of the hammer. Cross hairs in the reticle of the micro-

NEW PRODUCTS

scope provide an exact sighting point. The hammer channel in the base of the stand acts as a guide for quick spotting of the instrument over layout points. Ordinary skilled layout men can maintain an accuracy of better than .001 inch with this instrument.

In operation the Micro-Punch is placed on the surface to be marked and brought to a position where the cross hairs in the microscope coincide with the line intersection to be punched. Then the trigger is squeezed, releasing the hammer, which precisely punches the intersection.

Barrel Handling Truck

Valley Craft Products, Inc., 760 Jefferson Avenue, Lake City, Minnesota.—A new barrel handling truck, which is



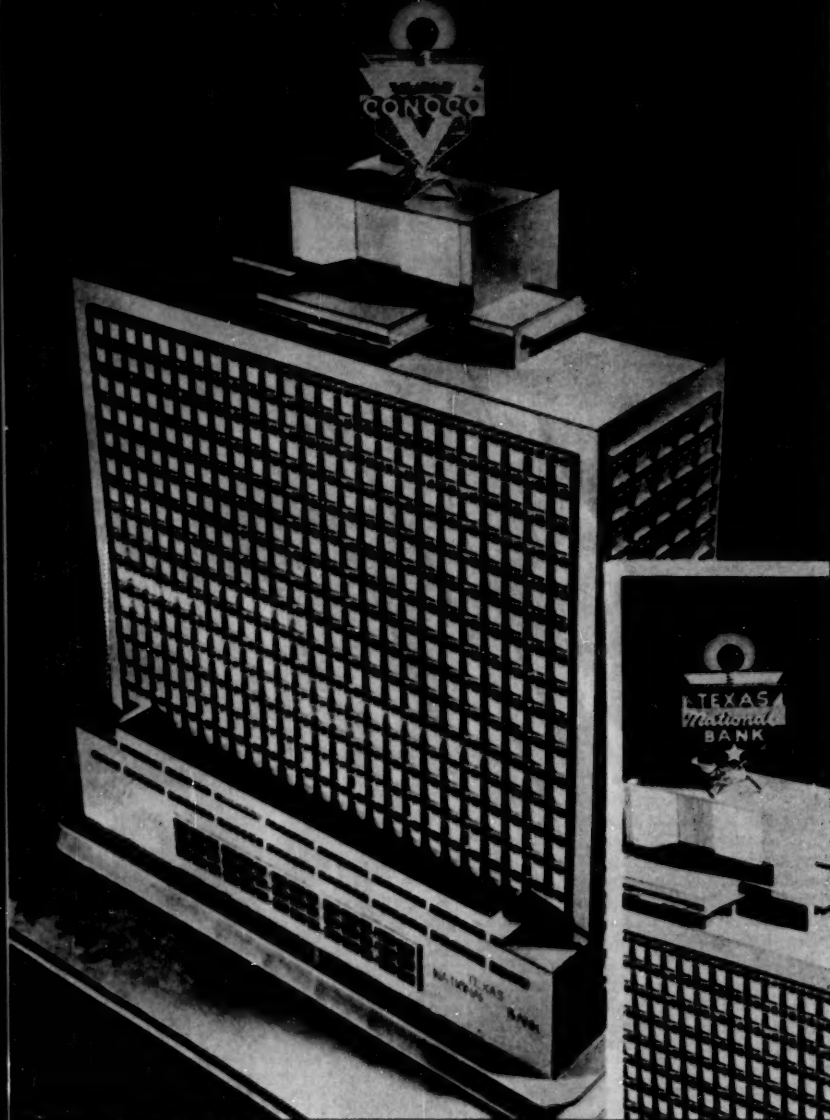
No tipping or pick-up space required.

said to require no tipping or pick-up space when handling barrels touching each other, has just been announced by the company.

Designated Valley Barrel Cart Model 600, the manufacturer says it is equipped with an automatic spring actuated bar that allows a hook to slip over the barrel edge as the truck is moved against the barrel without the operator touching either hook or barrel.

Heavy barrels stored in contact with each other can be easily loaded on the truck by a single operator without moving them apart because of this automatic clamping hook, it is claimed. Special design of the loading shoes provides easy tipping of the heaviest barrels.

These same features make it possible to unload barrels for storage without space between by merely releasing the barrel at the desired location as barrel slips off shoe when cart is tipped forward.



The nation's first electric spectacular sign ever to be shared by two major advertisers, will rise in Houston.

Two Major Advertisers to Share Electric Spectacular in Texas

A nationally-known oil company and a big Texas bank are joining forces to make outdoor advertising history by becoming the first major advertisers ever to share an electric spectacular sign—and a sign that will forecast the weather to boot.

Continental Oil Company and the Texas National Bank of Houston, which will share a new 21-story skyscraper office building, now under construction in downtown Houston, commissioned Federal Sign and Signal Corporation to create a giant roof sign for the building that would help sell petroleum products at the same time that the public's attention was drawn to the banking services of progressive-minded Texas National.

What came off the drawing board and is now being engineered and built by the sign company's subsidiary, Federal

Sign Company of Texas, is a \$125,000 two-sided sign to be built in the form of two huge 46 by 39 foot triangles, back to back, cleverly incorporating the famous Conoco red and white trade mark, with the reverse panel carrying the bank's name in white, yellow, and blue. The sign will revolve three times a minute permitting both companies to get a full showing. The designers believe that the 50-ton structure will be the biggest revolving sign in the country.

Topping off the spectacular will be a novel public service feature, a sky-high "Weather Eye"—a 15-foot plastic globe perched 400 feet above the street level which will report U. S. Weather Bureau forecasts with colored lights. Visible to Texans for 25 miles, lights in the dome will flash red for warmer weather, white for cooler, and green to indicate no change. Flickering of the 4½ million candle power fluorescent tubing in the dome will signal rain.

Industrial Research Center To Open in Little Rock

To be established in Little Rock about July 1 will be the new Industrial Research and Extension Center of the College of Business Administration, University of Arkansas. It will have a budget of \$102,000 a year for the next biennium and a staff of about 10 professional people.

Function of the Industrial Research Center will be to supply supporting research and statistical data to the staff of AIDC, to assist the communities of Arkansas and to sponsor from time to time industrial conferences and seminars.

Dean Paul W. Milan of the College of Business Administration said that a staff for the Center would be assembled within the next few months. Work of the Bureau of Business & Economic Research at Fayetteville will continue.

Florida Phosphate Industry Presents Many Opportunities

The rapid growth of the phosphate industry in Florida and the opportunities for new products and expansion were emphasized recently by Louis Ware, president of International Minerals & Chemical Corporation, who was guest speaker before a joint meeting of the civic and service clubs of Bartow.

"The real usefulness of this great industry is the phosphate which is shipped from here all over the country and all over the world to supply fertilizers and chemicals that are so necessary and add so much to the productivity wherever used," Mr. Ware said.

Mr. Ware said that during recent years there has been a great change in the fertilizer business and that this trend will continue for a number of years.

"I refer to the demand that has developed for high analysis goods richer in phosphorus, nitrogen and potash," he explained. "The farmers are learning to use this more expensive product which carries a greater percentage of nutrients for plant food, and have learned of its economy."

"As a result of this trend you have witnessed the construction of a number of large Triple superphosphate plants, such as our Bonnie plant, which makes not only Triple but also other products. The fact that most of the other producers have built these large plants here will indicate that it is more economical to locate them in this field, which has been a boon to this community. Approximately \$60,000,000 worth of new factories have been built and these large plants process the raw phosphorous into more valuable material—they up-grade it. This means more manufacturing here, more jobs, bigger payroll, and more wealth produced in Polk county."

Fourteen of the nation's largest railroads each burned a half a million or more tons of coal last year, with the Union Pacific consuming nearly 3 million tons.



"WHAT! NO KITCHEN TELEPHONE?"

Of all things, Mr. Bridegroom! Surely you don't expect that lovely new bride to get along without a telephone in the kitchen!

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Would you like to know more about complete telephone service and how surprisingly little it costs? Just call the business office of your local Bell telephone company.

Bell Telephone System Complete telephone service for home and business





Aerial view of the new Flowood Industrial District located on the outskirts of Jackson, Miss.

Jackson, Mississippi Organizes "Flowood" Industrial District

One of the latest additions to the growth of organized industrial districts in the United States is Flowood, a 300-acre tract located on the outskirts of Jackson, Mississippi.

The announcement of the organization of the Flowood properties as a completely integrated industrial district was made recently by H. M. May, president of Industrial Services, Inc., Jackson, before a joint meeting of the industrial and distribution-offices committees of the Jackson Chamber of Commerce. Industrial Services is handling the properties for the Flowood Corporation of Jackson.

According to Mr. May, Flowood is patterned closely after the Chicago Clearing District with respect to its organizational set-up, yet resembles Trinity Industrial District, Dallas, Tex., in its geographical characteristics. It is located in an adjacent rural county within the Jackson metropolitan area.

A portion of the area is reserved for industrial sites, while other sections have been set aside for service industries and residential development. Under construction on adjoining property is a 100-unit motel and complete shopping center.

Flowood is served by the Illinois Central and Gulf, Mobile & Ohio Railroads and is bounded on one side by U. S. Highway 80 east-west, near its intersection with U. S. Highway 51, north-south. The district has complete service facilities, including an adequate supply of electric power and natural gas, plus modern sewage and water service.

Private financing through lease arrangements is offered for both industrial plants and for light manufacturing and warehousing concerns. The district is completely zoned with protective covenants and all provisions for land and plant beautification.

A detailed brochure, showing the geographical layout and facilities, has been

prepared by Industrial Services for distribution to agents and prospective industries.

\$8½-million Bar and Rod Mill Now Building for Atlantic Steel

Construction work has now begun on the Atlantic Steel Company's new \$8,737,000 merchant bar and rod mill at Atlanta, Georgia. The Rust Engineering Company of Pittsburgh and Birmingham, announced recently. Completion of the mill is scheduled for September, 1956.

As general contractor for construction of the new mill, The Rust Engineering Company will design and erect both the mill building and warehouse building and will install all mill machinery, auxiliary equipment, and utilities. The reheating furnace for the new mill will be designed and installed by the Rust Furnace Company, and electrical installation work handled by Allegheny Industrial Electrical Company, Inc., both subsidiaries of The Rust Engineering Company.

Designed to be one of the fastest combination mills in the world, it will have a speed of 5,000 feet per minute on rods, and a production rate of 80 to 90 tons per hour for merchant products. The range of products from the mill will be rods, rounds, flats, angles, channels, and light beams of various sizes.

Unlike many merchant mills which have been designed as additions to, or modifications of, existing facilities, the Atlantic Steel Company's mill will be completely new from foundations through buildings and equipment.

The 21-stand mill will be located on a four-acre site adjacent to Atlantic's present plant in north central Atlanta, Georgia.

In announcing the plans for Atlantic Steel Company's modernization and improvement program, J. H. Girdler, vice-president in charge of operations, stated that the new mill will substantially in-

crease the company's capacity, product range and sales potential.

Louisiana Bagasse Paper Firm Expanding Capacity by One Half

The only plant in the United States using whole sugar cane bagasse for paper manufacture is being expanded from its present capacity of 50 tons of paper daily to 75 tons. W. A. Zonner, general manager, has announced.

The plant is that of Valentine Pulp & Paper Co. located seven miles south of here on storied Bayou Lafourche, in the heart of Louisiana's sugar bowl. It is owned jointly by Brown & Root, Inc., of Houston and the Valite Corporation of New Orleans. The \$5,000,000 plant was designed and constructed by Brown & Root.

Bagasse is the dry stalk of sugar cane after the juice has been extracted in the sugar mill. Heretofore it has been a waste and a nuisance, although some has been used for boiler fuel and for the manufacture of wall board. Great stacks of it in bales are visible around most Louisiana sugar mills. It is estimated Louisiana produces 800,000 tons of dry bagasse annually, less than 40 per cent of which is used. Progress of the Valentine plant has been closely watched by the sugar industry of the world.

As in all plants, a large amount of water is required and the Lockport plant pumps 60,000 gallons from Bayou Lafourche for every ton of paper produced.

The Lockport plant is located adjacent to the Valentine Sugars, Inc., sugar mill, insuring a year-round supply of bagasse. The paper plant employs some 100 workers, mostly from the immediate area, on a 12-month basis, spreading out employment in an area accustomed to sugar mill work only in the short harvest season.

Robert Gair Co., Inc., Buys New Orleans Box Manufacturer

Completion of the major phase of a long-range expansion program in the South by the Robert Gair Company, Inc., of New York was announced by George E. Dyke, president, after the acquisition of the Great Southern Box Company of New Orleans.

Shelley Schuster of New Orleans, who has been president of Great Southern, will continue to operate the business. He is expected to be elected to the Gair board of directors at the next meeting, Mr. Dyke said.

Great Southern and its two subsidiaries, Great Southern Box Company, Inc., of Mississippi and Great Southern Wire-bound Box Company with plants at Jackson and Magnolia, Miss., will be operated as divisions of Gair.

Gair, leading manufacturer of shipping containers, folding cartons and paperboard, also acquired the Southern Advance Bag and Paper Company, Inc., on May 2. It operates a large paper mill and kraft bag plant at Hodge, La., and has extensive timber holdings.

Duke Power Company Launches \$300-million Expansion

The Duke Power Company has announced its plans to spend \$300,000,000 over the next ten years to expand its facilities. This program follows the record \$231,000,000 postwar expansion program.

The biggest load for the Piedmont electric service area is for textile plants. Even in 1954, when most marginal mills were closed and the industry generally was in a recession, energy sales by Duke Power to textile companies showed a very slight increase over 1953.

Electric energy sales to other industrial customers was up approximately 10 per cent in 1954, compared with the preceding year.

Diversification has been under way in the Piedmont area, with important large industries undertaking plant building programs involving millions of dollars. That this diversification has been helpful is indicated in the fact that energy supplied by Duke Power now turns 40 per cent of the textile spindles in the United States. One-eighth of this is in Gastonia County.

Top name industrial corporations are rapidly moving into this section.

General Electric is building a \$20-million distribution transformer plant at Hickory, N. C., and a multi-million-dollar street lighting plant at Hendersonville, N. C.

Lithium Corp. of America has started a \$7 million plant at Bessemer City, N. C. P. Lorillard is constructing a \$13 million factory at Greensboro, N. C., which ranks second to Charlotte in size in the Carolinas.

Western Electric Co. and Douglas Aircraft have in process of conversion the old Quartermaster Depot for the manufacture of Nike guided missiles, a \$16 million project.

Other large projects include a \$10 million electronics plant of Western Electric at Winston-Salem; chemical plants of W. R. Grace & Co. at Simpsonville, S. C., and United States Rubber at Gastonia. Sprague Electric is spending \$4 to \$5 million on a new property at West Jefferson, N. C. Jantzen Knitting Mills, Inc., will have a large new mill for swim suits at Seneca, S. C.; National Container is spending around \$2 million at Salisbury, N. C.

Virginia Issues Directory On Manufacturing & Mining

The Virginia State Chamber of Commerce in Richmond has announced the issuance of the 1955-1956 Directory of Virginia, Manufacturing and Mining (Revised to April 1, 1955).

The new directory, the only Virginia one of its kind, includes an alphabetical listing of products with classification numbers keyed to product classification. It also includes an Industrial product classification section in which are listed the names, addresses, location of main office, number of employees and products of plants. Another valuable aid is a geo-

graphical classification which is keyed to both industrial and product classification.

More than 1800 manufacturing and mining firms are covered and in the main those employing more than fifteen persons.

Copies may be obtained from the Chamber of Commerce at 111 N. 5th St., Richmond 19.

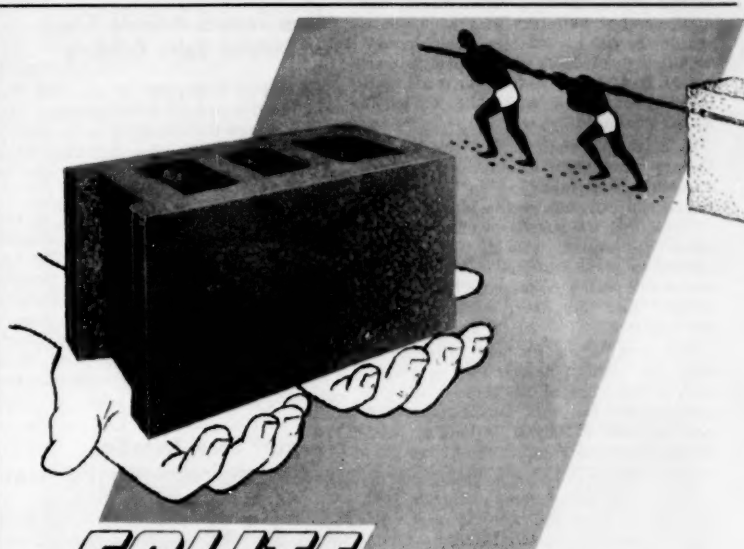
Atlanta Envelope Firm Acquires Miami Company

Another expansion step has been completed by the Atlanta Envelope Company, Atlanta, Georgia, with the acquisi-

tion in May of the Schutt Envelope Manufacturing Company of Miami, Florida. The parent company already operates another manufacturing division in Nashville, Tennessee, The Southern Envelope Manufacturers, Inc.

The new Miami company will be managed by Mr. John C. Schutt and operate as a separate unit handling the distribution of Aeeco products in the South Florida area.

Atlanta Envelope Company is currently expanding its Atlanta plant with a 10,000 sq. ft. addition to handle sheeting of paper. The three plants now in the Atlanta group make it the largest envelope manufacturing chain in the South.



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Brutal! The one word for describing the way the Egyptians misused man power in order to construct their monuments of lasting beauty!
Amazing! The one word for describing the way you can build just as permanent monuments today without putting even one eighth of the strain on your workmen.

The way, of course, is Solite!

As the name implies, these masonry units are so light that construction can be speeded up to a new record high. So light that workmen can handle them with ease. So light . . . yet so strong!

Yes, Solite blocks are 1/4 lighter than ordinary concrete units . . . and they are extra strong and durable. And don't forget that Solite has all the most wanted construction features built right into each unit with our carefully controlled manufacturing processes.

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 OFFICES: P. O. BOX 205, RICHMOND, VA.; P. O. BOX 1843, CHARLOTTE, N. C.

Corpus Christi Port Improvement

(Continued from page 34)

000 with which to begin the four-mile channel extension, which ultimately will cost \$1,500,000.

Percy V. Pennybacker, State Highway Department engineer, assigned to work on the new bridge was authority for the statement that it will be the highest in the Southwest. He said it will be two feet higher than the bridge linking Port Arthur and Orange, which formerly held the highest bridge honors.

Overall height of the Corpus Christi bridge will be 235 feet, or the equivalent of a 23-story building. Clearance above sea level will be 140 feet, high enough to allow the largest ships afloat to pass safely. It will be 5800 feet—or more than a mile long—and will take 20 to 24 months to build.

R. E. Saltee, chairman of the Nueces County Navigation Commission, admits to a twinge of nostalgia as he contemplates the removal of the old bridge.

"It served its purpose well for many years, making it possible for Corpus Christi to grow into one of the nation's top nine ports in tonnage," said Mr. Saltee. "But ships keep getting bigger and bigger."

The new upper channel crossing—a high lift span to be 300 feet in length with a clearance of 138 feet—will be a combination rail and vehicular bridge and will cost \$5,900,000. It will be used by the Southern Pacific's main line into Corpus Christi.

Spoil from the channel extension will be used as a fill for highway and railroad approaches to the bridge.

Launching the big overall improvement program fulfilled months of intensive teamwork by governmental and civic agencies devoted to laying the foundation for the future growth of the Corpus Christi area.

Among these groups was the Board of Trade, Port of Corpus Christi—a unique organization of industrialists who take the lead in inviting other industries to locate in the area.

The board of trade idea grew out of a conference between three Corpus industrialists—Mr. Singer, Stanley Hultman and Fred Sewell—who believed that

increasing the number of industries would benefit existing industries and the port as well.

They talked with the heads of other plants in the Corpus Christi area about the idea of underwriting an organization which would carry on a nationwide drive to bring in more industries. It was emphasized that the organization would work in close harmony with existing agencies working for community welfare.

The suggestion was adopted and the Board of Trade, Port of Corpus Christi, was in business.

Alcoa Selects Atlanta Site For District Sales Building

Aluminum Company of America has announced purchase of an Atlanta, Ga., lot, on which the company is to build a new district sales office building. Construction is to start in the summer of 1955.

Highlight of the building will be the use of Alcoa's new colored aluminum finish on exterior wall facings. The finish, subject of much interest among architects and builders, was successfully introduced in November, 1954, at Alcoa's two-story Cincinnati sales office building, and has since been specified for a number of building jobs throughout the country.

Newport Steel Installing Two Ingot Preheating Furnaces

Start of construction by Newport Steel Corporation of two ingot preheating furnaces as part of the mill's program for a further increase in production capacity was announced by Robert E. Harvey, executive vice president and general manager.

The additional facilities are being installed in the Wilder, Ky., plant section housing Newport's new reversing hot strip mill, and will complement the six circular soaking pits which now service the hot rolling operation.

Newport Steel's production capacity was stepped up last month with the return to operation of two more of its seven open hearth furnaces. A total of three

electric and five open hearth furnaces are now in service.

\$5,800,000 Expansion Planned By North Carolina Paper Firm

The 1954 Annual Report of Riegel Paper Corporation announces plans for a major expansion of our mill. This expansion is designed to increase production capacity by about one-third to a total of 420-450 tons per day at an estimated cost of \$5,800,000.

One of the major purchases planned will be a new recovery furnace having a capacity of 1,050,000 pounds of solids per day. This is one-third larger than our present boiler. Another major addition will be a 12,500 KVA steam turbine for the power plant. A complete set of evaporators will be added.

Other important additions will be made throughout the entire mill.

The woodyard will be enlarged by adding a new chipper, plus additional facilities for wood handling and chip screening.

The pulp mill will be enlarged by the addition of twodigesters. Another Sprout-Waldron refiner and another brown stock washer will be added in this same area. The screen room will be enlarged by the addition of a rotary screen and a flat screen.

Thirty-five dryers will be added to the Kamyr pulp dryer, and the pulp dryer building will be extended. An additional line of pulp bale conveyors will be constructed complete with press, bale tyer and stacker.

Kentucky Utilities Planning \$18½-million Improvements

Kentucky Utilities Company, Lexington, has announced a 1955 budget of \$18,741,000 to extend and improve its electric system. Largest single expenditure will be about \$8,000,000 on the first unit of the 100,000-kilowatt E. W. Brown steam-electric generating station at Dix Dam. A like amount will be spent during 1956, when the unit is scheduled to begin operation.

Other major items are: \$643,000 for a 20-mile 69,000-volt transmission line from the company's Tyrone power plant to Georgetown, a 13-mile extension to a proposed rural electric cooperative substation in Scott County and related substation facilities; \$260,000 for a 23.8-mile, 69,000-volt transmission line between Rosine in Ohio County and Leitchfield and related substation facilities; \$359,000 for a 25.7-mile, 69,000-volt transmission line between the Owensboro Green River Steel Mill Substation and Zion and related substation facilities; \$244,000 for a microwave-radio communication system to provide for voice dispatching of power and telemetering of circuits connecting Dix Dam with the Lexington general office, the Green River generating station near Central City and the Pineville generating station; \$300,000 for a Western Kentucky office building at Paducah.

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RICHMOND 5, VIRGINIA

Georgia Power to Participate In \$54-million Atomic Plant

Plans to participate in the construction of a 100,000-kilowatt atomic-powered electric generating plant were announced by the Georgia Power Company.

The proposed plant, subject to approval by the Atomic Energy Commission, will be constructed in Michigan, by a group of electric utilities, engineering and manufacturing companies. The plant will be completed in 1959 provided prompt authorization is obtained from the AEC. It will cost \$54,000,000, of which \$45,000,000 will be required for a nuclear reactor and \$9,000,000 for a turbo-generator.

Harlee Branch, Jr., president of the power company, expressed the opinion that an atomic power plant would be under construction in Georgia in about 12 years; this is based on the assumption that the cost of producing power by atomic fission can, within that period, be made competitive with present plants burning coal, gas or fuel oil.

"The Changing South"—a Movie Produced by Makers of Solite

A movie made in the Southland . . . about the Southland . . . to interest every type of southern audience.

This is how A. Cabell Ford, Director of Sales of the Solite Corporation of Richmond, Va., and Charlotte, N. C., sums up

his firm's first movie-making venture, which resulted in the production of "The Changing South."

Produced by Cabell Eanes, Inc., of Richmond, the film is in full color and 18 minutes long. It shows how the building face of the South is changing and of the influence of Solite, a lightweight aggregate, in bringing about this change.

"The Changing South" has just been released for public showing to architectural and engineering associations, civic groups, colleges and schools. Black and white prints are also available for use by television stations.

"Our company story," Ford states, "is so tied up with industrial development in the South that it is hard to separate one from the other. As soon as we got into production, we realized that we had to tell much more than the story of the development and use of Solite."

The key to the movie, which took one year to produce on locations throughout the South, is a story book type of southern colonel, with the traditional goatee, black string tie and cutaway coat. His experiences add dash and humor to the film and provide a chuckling climax when the colonel—as well as the South—emerges with a new personality.

Fresh from a tour of his native land, the colonel finds himself as outmoded as the thinking of many people about the South. As he relives his travels, he recalls the scant remnants of the past which still remain today . . . the sprawling mansions, whistle stop railroads and cultivated fields, unmarred by the intru-

sion of people. These flash on the screen, only to stand out in stark contrast to the South of today . . . the industrial Southland which supplies many of the needs of the world.

Dow Chemical's Velasco Plant To Produce Synthetic Glycerine

The Dow Chemical Company announces its new synthetic glycerine plant is expected to be in production at its Texas Division facilities at Velasco late this summer. Utilizing the company's own process, it has a rated capacity of 36,000,000 pounds per year.

The plant, marking Dow's entry into glycerine manufacture, will be the second synthetic unit in the world producing on a commercial scale, the material fitting naturally into the company's broad pattern of products derived from the basic raw materials, liquefied petroleum gas and brine. Construction started about a year ago.

Donald Williams, vice president and director of sales, said Dow decided to enter glycerine production as a result of increasing demand for the synthetic product. He added that while this important industrial chemical has been available for more than a century as a by-product of the soap industry, the mounting popularity of the new synthetic detergents has changed the supply picture. These cleansing agents yield no glycerine, and users have turned to the chemical industry for new sources of supply.

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Tough, versatile, durable for difficult construction and restoration. "GUNITE"—pneumatically applied sand and cement—is placed direct, conforms to any shape specified. Get "GUNITE"—the most practical construction material since 1912—adapted to your toughest problems by "GUNITE" Associates, Inc.

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Norfolk and Western to Buy Eight Diesel Locomotives

The Norfolk and Western Railway will purchase eight general purpose diesel locomotive units, it was announced by R. H. Smith, president of the railroad.

The new units will be operated on the light traffic branch line between Lynchburg, Va., and Durham, N. C., and will enable the N. & W. to transfer the heavy steam locomotives now in use on that branch to main line operations where they are needed for heavy duty service. Delivery of the diesels is expected in September.

Single diesel units will be used in yard switching operations and in multiples of three or four for straight road haul service.

"This does not mean that we have changed our view that our modern roller bearing coal burning steam locomotives can handle the major part of our traffic economically," Mr. Smith said in making the announcement. "Nor does it mean that our interest in new and better types of coal burning locomotives has diminished in any way."

The cost of the new locomotives will be about \$1,400,000. At the same time it was announced that the N. & W. is ordering 500 steel box cars from the Pullman Standard Car Manufacturing Company at a cost of \$3,600,000.

Major reasons for the switch to diesels on the Durham Line, the railroad president said, is "based on our need at the

present time for additional motive power elsewhere, and particularly for the large type power we are at present using on the Durham Line, where, because of comparatively thin traffic, we are not able to get out of this large power the full service of which it is capable. We have therefore concluded that the smaller diesel units will be sufficient for that territory."

Ketona Chemical Expanding Facilities at Tarrant, Ala.

Ketona Chemical Corporation has announced that the Fluor Corporation, Ltd., Los Angeles, California, has been awarded a further contract to design, engineer and construct facilities for the production of nitrogen solutions (ammoniated nitrate of ammonia) at Ketona's plant site near Tarrant and close to Birmingham, Alabama.

Nitrogen solutions are being used in increasing quantities by fertilizer mixers in the formulation of balanced fertilizer materials.

These added facilities, in addition to the ammonia synthesis unit previously announced, will greatly improve Ketona's capacity to serve both agriculture and industry throughout the Southeast.

The Ketona plant, jointly owned by Alabama By-Products Corporation, Birmingham, Alabama, and Hercules Powder Company, Wilmington, Delaware, will begin production of ammonia in the late fall, while solutions production will follow early in 1956.

The Ketona plant is unique among ammonia plants in that it is the first plant in this country based entirely on coke oven gas, and this wholly new type of industry will diversify still further the industrial production of the Birmingham district.

Southern States Iron Roofing Occupies Atlanta Warehouse

The Southern States Iron Roofing Company has recently moved into their new Atlanta warehouse and manufacturing plant in Atlanta. This modern new building designed with customer service in mind offers almost triple the amount of space of the old warehouse formerly occupied by the building distributor.

The new warehouse has 76,000 square feet of space in addition to the four thousand square feet of office and administrative facilities. Part of the new building is being used to manufacture Colorweld Coil, which is pre-enameled metal. This paint line runs almost the entire length of the building, however it occupies less than one-sixth of the floor area.

The offices are air-conditioned, while large exhaust fans in the plant draw air from front to back. The plant is heated, an unusual feature to be found in Southern warehouses. The new Reynolds Aluminum acoustical ceiling, ReynoCoustic, is used in the offices to reduce noise.

Heading the staff of approximately fifty employees is the Branch Sales Manager, Jule Petris. Mr. Petris, formerly Atlanta Branch Manager, will direct the sales activities of the new branch while Marion Peek, formerly Branch Manager at Savannah, will be in charge of plant operations.

Louisville Chemical Firm To Double Its Capacity

A \$2,500,000 expansion at the Louisville, Kentucky, plant of B. F. Goodrich Chemical Company has been announced by company President John R. Hoover. The expansion will double the plant's present capacity for the production of Hycar special-purpose American rubber and latex.

Construction of the new production facilities adjacent to the present operation will begin immediately, Hoover said, with completion scheduled for early next year. The Girdler Company of Louisville, Kentucky, has been named as general contractor.

"This expansion is a natural result of the increasingly heavy demands from industry for Hycar man-made rubber and latex," stated Hoover. "These demands reflect the development of entirely new applications in many fields."

The Louisville expansion program is closely allied with the company's new \$8,500,000 acrylonitrile plant now being completed at Calvert City, Kentucky.

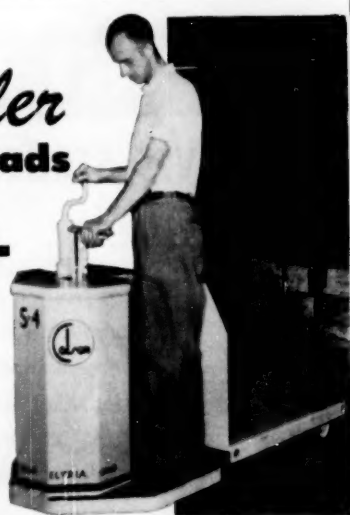
Acrylonitrile, one of the basic raw material components of Hycar rubber and latex, will be furnished to Louisville for processing from the Calvert City plant.

Colson new Handler Lifts 4,000 lb. Loads it's WISCONSIN- POWERED!

The operator of this new Handler built by Colson Corp., Elyria, Ohio, uses only one fool-proof control to lift 4,000 lb. loads free of the floor. By a touch of the same control lever, the operator shifts into either forward or reverse speeds . . . on stops the same control also governs the brakes. And when it came to choosing power for this unique machine, Wisconsin Heavy-Duty Air-Cooled Engines got the nod . . . with good reason.

The power plant is the 4-cycle single-cylinder, 6 hp. AKN model. It combines heavy-duty lugging power with compactness . . . minimizing the problems of the design engineers. It also offers such features as tapered roller bearings at both ends of the crankshaft, fool-proof air-cooling and rugged construction throughout . . . to deliver the kind of dependability users expect to get. And the Wisconsin's easily serviced OUTSIDE magneto with impulse coupling delivers quickest, any-weather starts and steadiest performance always.

Write for details about all 4-cycle single-cylinder, 2-cylinder and V-type 4-cylinder models, 2 to 36 hp.



WISCONSIN MOTOR CORPORATION

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MILWAUKEE 48, WISCONSIN

Westinghouse Staunton Plant Most Automatic of Kind in U. S.

The Westinghouse Staunton plant unveiled last month is the nation's most automatic plant devoted exclusively to the manufacture of packaged air-conditioning equipment for both residential and industrial use. It is the first large metal-working plant in this section of Virginia. (see picture, May **Manufacturers Record**, page 79).

This new ultra-modern building located three miles north of the city in Verona on U.S. Highway 11, is a vital part of the Westinghouse 296-million-dollar expansion program which began in 1950 and is now virtually completed.

Situated on a 120-acre tract of land, the new structure is of steel and concrete construction faced with brick. Manufacturing areas are of one-story construction while a two-story office area extends across the front of the building. The entire building covers about 300,000 square feet of floor space or the equivalent of an area enclosing five regulation size football fields. Adjacent to and served by the Chesapeake and Western Railway, it can accommodate as many as eight freight cars and eight trucks under cover at one time.

Approximately 425 people are employed in the plant with an annual payroll of nearly two million dollars. Eventually, it is expected that more than 500 men and women of this vicinity will be employed here with a corresponding increase in annual payroll. The plant is headquarters for Westinghouse's Air-Conditioning Division.

Packaged air-conditioning units from 2- to 15-ton capacities are now being manufactured at Staunton. These units include commercial type as well as residential type cooling units, including the combination cooling and heating units for residential use. The new all-electric Westinghouse Heat Pump, which uses only air and electricity to provide year-round cooling and heating, is also made here. Higher capacity Westinghouse air-conditioning equipment and accessories up to 100 tons are manufactured at other company locations.

A majority of the working force of the new plant has been hired from Staunton and adjacent areas. Only a skeleton crew of trained supervisors were brought in from other Westinghouse locations. On-the-job training is being conducted by Westinghouse in order for new employees to become familiar with their jobs and the many machines used in the operation.

A recent survey shows that Westinghouse in Staunton now purchases materials and services from Virginia firms at the rate of one million dollars a year. When production comes up to forecasted levels, these purchases will considerably exceed this figure.

In a statement at the unveiling, Harry E. Seim, Westinghouse vice president in charge of the Air Conditioning and Sturtevant Divisions, stated . . .

"After considering and studying numerous sites for this plant, may I say that we of Westinghouse are proud we

have been able to become a part of the Valley of Virginia. This is our first manufacturing plant in Virginia and we are deeply grateful for the wholehearted cooperation of the many organizations and individuals who contributed so much to our decision to locate here. Among these were the Staunton Chamber of Commerce, the Staunton City Council, the Augusta County Board of Supervisors, and the Virginia Electric & Power Company."

Turner Construction Company of New York built the plant. Architectural and engineering work was done by Robert & Associates of Atlanta, Ga.

Other Westinghouse installations in the South include a new electric meter plant at Raleigh, N. C., lamp plants at Vicksburg, Miss., Reform, Ala., Richmond and Owensboro, Ky., Little Rock, Ark., and Paris, Tex., a plastics plant at Hampton, S. C., and a new welding equipment plant at Montevello, Ala.

Gas Liquids Extraction Plant Planned Near Lindsay, Okla.

Construction will begin soon of an ultra-modern natural gas liquids extraction plant jointly owned by Phillips Petroleum Company and Magnolia Petroleum Company to be located approximately three miles southwest of Lindsay, Garvin County, Oklahoma, according to K. S. Adams, chairman, and Paul Endacott, president of Phillips, which will operate the plant.

The plant will extract natural gasoline components and liquefied petroleum gas

from natural gas produced from the Northwest Purdy, West Lindsay and Bradley Area pools, the latter a new deep multi-zone discovery made last year by Phillips and now undergoing extensive development.

The dry natural gas from the plant will be delivered to a new 140-mile 24-inch pipeline to be laid by Transok Pipe Line Company to Tulsa to supply the Public Service Company of Oklahoma's generating station.

Varnish Firm Locates Plant At High Point, North Carolina

Reliance Varnish Co., Inc., Louisville, Ky., will construct a large varnish and paint producing plant in High Point immediately, according to an announcement made recently by Ben Robertson, Sr., chairman of the Board of Reliance, and Ed Mendenhall, president of High Point Chamber of Commerce.

The new industry has bought 4.03 acres of land of the High Point Industrial Corp. site on Prospect Rd. and Progress St., and will start construction of a series of four industrial building units, totaling 32,000 square feet. The first unit will be 8,000 square feet and will cost approximately \$32,000.

About 50 persons will be employed at the Reliance Varnish Co. plant, it was learned, with an annual payroll approximating \$200,000. More than \$100,000 worth of machinery will be installed for the local operation. Products will include wood and metal industrial finishes.

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CONNORS STEEL DIVISION

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FINANCIAL NOTES

Consolidated sales of **West Virginia Pulp and Paper Company** and its corrugated box division, **Hinde & Dauch Paper Company**, amounted to \$84,538,000 for the six months ended April 30, as compared to \$82,023,000 for the same period in 1954, it was reported by David L. Luke, Jr., president.

Consolidated earnings after taxes for the first half of 1955 came to \$6,254,000, or \$1.22 per share of common stock, as against \$6,145,000, or \$1.20 per share of common, for the same period in 1954.

After accounting for all charges, **Missouri Pacific System** net income for March, 1955, was \$2,446,101, compared with \$1,735,062 for March, 1954—up 40.9 per cent. For three months net income was \$3,879,472, compared with \$2,063,050 for three months of 1954.

Gross revenue: For March, 1955, totaled \$25,418,385 compared with \$25,308,613 for March, 1954. Three months, \$70,043,443 compared with \$71,499,510 for same period, 1954.

Republic Steel Corporation completed a quarter century of operations with its finances, plant and raw materials reserves in the best condition in its history, T. M. Girdler, chairman, and C. M. White, president, disclosed in the company's 25th annual report.

Sales and operating revenue in 1954 amounted to \$852,825,669 as compared with \$1,145,103,840 in 1953. Consolidated net income for 1954 was \$52,875,164 or \$7.10 per share on 7,325,956 common shares outstanding at the end of the year. In 1953 the company had net income of \$56,743,547 or \$9.25 a share on the 5,952,919 common shares then outstanding. Net income per dollar of sales rose to 6.2 cents in 1954 from 5 cents in 1953.

Steel production last year totaled 6,972,812 tons of ingots with an operating rate of 69.8 per cent compared with 9,630,454 tons at an operating rate of 94.5 per cent in 1953. The company currently has an operating rate of 96.0 per cent.

The world's largest producer of carry-home cartons for the soft drink bottlers and the brewing industry, grossed \$20,810,000 in sales in 1954.

Arthur L. Harris, president of **Atlanta Paper Company**, told stockholders at their annual meeting recently that sales for the package manufacturing firm were up 12 per cent over last year's sales.

After income taxes, net profit was \$499,000. In 1953 net profit was \$468,000, Mr. Harris reported.

"Evidence of the rapid growth and expansion of Atlanta Paper Company," the president told his stockholders, "can be seen by comparing operations now with those 10 years ago. Gross sales have increased from \$8,000,000 to \$21,000,000. Working capital has soared from \$600,000 to \$2,700,000. Total assets have climbed from \$1,800,000 to \$7,700,000, and the net worth has increased from \$900,000 to \$4,500,000."

Net income of \$8,083,000 was reported by **Tide Water Associated Oil Co.** for the first quarter of 1955, after provision for estimated federal income tax, D. T. Staples, president, told the annual meeting recently.

Net earnings applicable to the common stock amounted to \$0.67 per share, after deducting the \$749,000 in dividends declared on the preferred stock. Net earnings for the similar quarter of 1954, when no preferred stock was outstanding, amounted to \$8,888,000, or \$0.69 per share.

Gross income for the first quarter amounted to \$121,026,000 as compared with \$119,199,000 for the like 1954 quarter. Net crude oil and natural gas liquids production averaged 100,000 barrels per day during the period, as against 97,000 barrels per day during the first quarter of the previous year.

Staples told stockholders that ground had been broken for the new 130,000-barrel Delaware Flying A Refinery on a large site 15 miles south of Wilmington, Del. He pointed out that the site of more than 4,000 acres is adequate for the addition of petrochemical or other manufacturing facilities.

Reynolds Corporation, an affiliate of Reynolds Metals Company, is offering to buy all common and preferred stock of **Southern States Iron Roofing Company**, a distributor of sheet metal and other building products with warehouses in 12 southern cities.

Reynolds Metals now owns 53% of the common stock of Southern States Iron Roofing, but owns none of the firm's preferred stock.

Reynolds Corporation is offering \$2.00 per share for the common stock, and \$15.00 per share for the preferred stock.

Net profit of **United States Rubber Co.** for the first three months of 1955 was 32 per cent higher than in the same period last year and nearly 10 per cent above any previous first quarter, according to a report to stockholders released recently by H. E. Humphreys, Jr., chairman.

Net profit for the quarter was \$9,940,276, equivalent to \$1.63 a share of common stock, compared with \$7,545,109, or \$1.18 a share, in the same quarter of 1954. The previous first-quarter record was \$9,076,755, or \$1.47 a share, set in 1951.

Net sales for the quarter were \$225,161,081, or 18 per cent above the first quarter last year, when sales were \$190,103,720. Sales were within one per cent of the first-quarter record set in 1953.

Delta-C&S Air Lines has reported a net profit of \$622,000 on operating revenues of \$16,068,000 for the first quarter of 1955.

Delta's board of directors met for the first time in St. Louis, one of 55 cities served by Delta-C&S on its 10,000-mile system in the U. S. and six Caribbean countries. John R. Longmire, St. Louis investment banker and a board member, was host to the meeting.

C. E. Woolman, president and general manager, reported net earnings of \$1,063,000 and operating revenues of \$43,056,000 for the nine months' period ending March 31, the first nine months of the fiscal year ending June 30, 1955.

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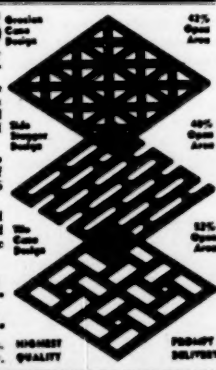
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BUSINESS NOTES

According to Henry L. Seale, newly elected President and Chairman of the Board of the **Lindquist Pump Corporation of Texas**, formerly the Lindquist Pump Corp. of 10001 W. Jefferson Blvd., Culver City, a number of major developments have recently been placed into effect.

Due to expansion, the new general sales offices and engineering department are now located at 2207 Border Street, Torrance 3, California, phone FAirfax 8-2510.

A new Board of Directors and executive group have been formed: Henry L. Seale, President and Chairman of the Board; Joseph D. McNeff, Executive Vice President; John Erhard, Secretary, and Thomas A. Benavides, General Sales Manager.

Mr. Seale is President of the Henry L. Seale Aviation Supply Company of Dallas, Texas, manufacturers of aircraft engines for Beech Aircraft, and a Director of Dealers National Insurance Co. of Dallas.

Mr. McNeff is executive Vice President of the Falcon Mfg. Co., Dallas, and President of Plasco, Inc. and McNeff Industries, both of Grand Prairie, Texas.

Mr. Erhard is a prominent Dallas attorney, a Director of the Empire State Bank of Dallas, and is on the board of several companies.

Mr. Thomas A. Benavides is now in complete charge of foreign and domestic sales.

A new Southwest warehouse for the Lindquist Pump Corporation of Texas has been set up at 3110 Lone Field Drive, Dallas, Texas, to expedite territorial shipments and sales. New distributors for the Southwest include: Western Pump Distributors, Lubbock, Texas; Alliger & Sears, Houston, Texas; Layne-Louisiana Co., Lake Charles, Louisiana.

Farm and Ranch Magazine is opening a new editorial office in **Atlanta, Georgia**, at 1447 Peachtree Street, Northeast. This office, supplementing Farm and Ranch's present Nashville and Dallas offices, will enable the magazine to give better-than-ever editorial coverage of the South.

Bill Kennedy, Editor of the Dixie Edition of Farm and Ranch, is moving to Atlanta and will primarily travel in the South Atlantic and lower South territory. Farm and Ranch has more circulation in the South than any other magazine.

The Grace Chemical Company takes pleasure in announcing the establishment of its main office at its plant location, **P. O. Box 4906, N. Station, Memphis, Tennessee**.

Appointment of **Mr. E. L. Mountcastle of Charlotte, North Carolina**, as representative for **Eclipse Fuel Engineering Co.** in North and South Carolina has just been announced by **Mr. James H. Sands**, Executive Vice President in Charge of Sales, of the Rockford, Illinois, company.

Mr. Mountcastle will act as exclusive sales and service representative for the complete Eclipse line of industrial and commercial heating equipment, including gas and oil burners, high temperature Dowtherm heating systems, process steam boilers, combustion equipment and controls, and industrial furnaces, as well as Fan-air gas and oil burners manufactured by **The Mettler Co., Inc.**, Los Angeles Division of Eclipse Fuel Engineering Co.

Mr. H. L. Simmons, president of **Sarco Company, Inc.**, has announced the appointment of the following new Sarco Sales Representatives: **J. B. Lammons Company, 1596 Madison Avenue, Memphis, Tennessee**; **Mr. Robert Porter, 224 N. Congress St., Jackson 2, Miss.**

Sarco and Sarcotherm are leading manufacturers of steam traps, temperature regulators, heating specialties and Sarcotherm weather compensated control systems. The main sales office is located in the Empire State Building, factory in Bethlehem, Pa.

The Dependable Machine Company, Inc., Greensboro, N. C., was recently purchased by local individuals, including the founder and former owner, **John C. Inmon**, and two former employees. During the past two years the company was owned by **Robert H. Solem of Wisconsin**

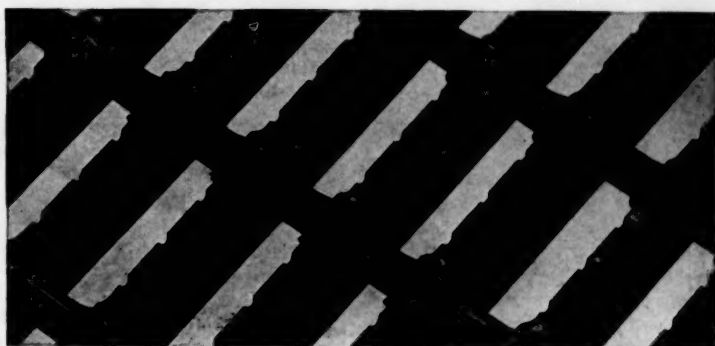
Knife Works, Beloit, Wisconsin, and **A. L. Riche of Freeport, Illinois**. Under the new ownership a new corporation was formed and the following officers were elected: **Charles S. Routh**, Chairman of the Board; **John C. Inmon**, President; **Charles G. Monnett, Jr.**, Vice President and Secretary; **S. W. Inman**, Vice President and Treasurer.

The United States Hoffman Machinery Corporation has purchased the **Intercontinental Manufacturing Company, Inc., of Dallas, Texas**.

U. S. Hoffman manufactures textile maintenance equipment, pneumatic conveying systems, centrifugal blowers and exhausters, oil filtration units, metal finishing and ordnance equipment. It also operates several ordnance plants.

Purchase of Intercontinental was made in keeping with the company's planned program for expansion and diversification of its sales and manufacturing activities, according to **Hyman Marcus**, company president.

The Texas company operates two plants. Its main plant in Garland is five miles northeast of Dallas and occupies 180,000 square feet of floor space on a 23-acre tract. Its Brady, Texas, plant has a manufacturing area of 200,000 square feet. It is located on 324 acres of land along with Intercontinental's privately owned Curtis airport.



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WHO'S WHERE

American Brake Shoe Company has appointed **William J. Grant** as southern sales manager for railroad products. He will be in charge of sales for three company divisions, National Bearing, Southern Wheel and Brake Shoe & Castings.

Mr. Grant joined Brake Shoe as a sales representative for the Brake Shoe & Castings Division in 1941, and was manager of southern sales for the National Bearing Division prior to his new appointment. He will continue to be located at the company's sales office in Norfolk, Virginia.

William Freegard has been named superintendent of the new **Bird & Son, Inc., Roofing Plant** at Charleston, South Carolina.

He joins Bird & Son with long experience in the asphalt roofing industry.

William J. Van Akin, Vice President of Manufacture of **The Ruberoid Co.**, has announced that **Richard James Grady** has been appointed superintendent of the Ruberoid plant in Savannah, Georgia. He will assume his new duties immediately.

Grady will replace **Frank Hickerson** who has been superintendent of the plant since it was acquired by Ruberoid in March, 1954. Hickerson will become assistant to the sales manager of the Savannah district.

James Q. Wray, Jr., has joined **Duke Power Company** as assistant to the chief engineer. It was announced recently by David Nabow, vice-president and chief engineer.

A native of York, S. C., and a graduate of Clemson College in electrical engineering, Mr. Wray has already assumed his duties in the company's general office.

Patrick D. Huff, formerly assistant engineer at the company's Winston-Salem branch, has been promoted to assistant distribution engineer in the General Office.

He succeeds **Frank W. Edwards**, who was recently appointed Distribution Design Engineer and placed in charge of the newly-organized Distribution Planning and Design Office.

Appointment of **Frank Lang, Jr.**, as Resident Plant Manager of the **Brooks Equipment & Manufacturing Co.**, a recently acquired subsidiary of **Borg-Warner Corporation** at Knoxville, Tenn., was announced recently. For the past year Mr. Lang has been Plant Superintendent and Personnel Manager of the Wausau Manufacturing Co., another Borg-Warner subsidiary at Wausau, Wis.

Edward F. Harrington has joined the staff of the Sales Development Department of **Tube Turns**, Louisville, Ky. The

announcement was made by John G. Seiler, executive vice president and general manager of Tube Turns, a division of the National Cylinder Gas Company, Chicago.

Promotion of **Ray L. Mitchell** to the position of Sales Manager of **Vulcan Steel Container Co.**, Birmingham, Ala.



Ray L. Mitchell

bama, has been announced by Company President, Gordon D. Zuck.

Mitchell joined this company in 1953. He is a graduate of the University of Alabama. He served in the Navy in World War II, and spent several years in industrial sales work.

His headquarters will be at the company's main office and plant in Birmingham.

Robert L. Sears has been named South-Central District Representative for the **Gorman-Rupp Company**. Mr. Sears joined Gorman-Rupp in 1954 after seven years'



Robert L. Sears

experience in the pump industry. He was formerly associated with the F. E. Myers & Bro. Co. of Ashland, Ohio.

The lower Mississippi Valley and Delta areas are to be covered by Mr. Sears. He will make his home in Memphis, Tennessee.

A. Milne & Company, New York, N. Y., nationwide distributors of solid and hollow tool steels, announce the appoint-

ment of **Mr. William L. Morris** as **Birmingham, Alabama, Sales Representative** with headquarters at 1727 Sixth Avenue North, Birmingham 3, Alabama.

The appointment of **J. T. Black** as general superintendent of **Connors Steel Division** plant was announced today by B. C. Blake, vice president and general manager of Connors, a division of **H. K. Porter Company, Inc.**

Mr. Black has been in the operating department of Connors since 1936, except for World War II years when he served in the Navy. He became master mechanic at Connors in 1946.

Seaboard Air Line Railroad Company has announced effective this month **Mr. J. L. Sturdivant** is appointed General Agent, Memphis, Tenn., succeeding Mr. N. C. Osborn, assigned special duties.

Reynolds Metals Company has announced the appointment of two new Louisville plant managers, **R. M. Chamberlin** and **Frank Ballard**, for the aluminum firm's Plant 10 at 821 South 12th Street and Plant 9 at 2827 Hale. Alan Sparks, who has been manager of both operations, has been elevated to manager of all foil and printing operations in the Louisville area.

E. A. Manetta has been named assistant superintendent motive power-personnel of the **Norfolk and Western Railway**. He succeeds the late O. F. Hark.

Manetta has served for the last five years as personnel assistant-mechanical in the motive power department. He went to work in the railway's Roanoke Shops in January, 1939, after graduating from Georgia Tech in electrical engineering. He became a special apprentice at Shaffers Crossing, Roanoke, the following July and later worked as a draftsman in the office of the general superintendent motive power.

Paul K. Nichols has been appointed General Manager of the **Granco Steel Products Company**, St. Louis, Missouri, it was announced by John N. Marshall, Chairman of the Board and President of the Granite City Steel Company, Granco is a subsidiary of Granite City Steel.

Mr. Nichols, who lives at House Springs, Mo., was until recently a vice president and the manager of operations of the Laclede-Christy Company. In 1950 and 1951, Mr. Nichols was chief structural engineer for Granco Steel Products Company.

The **Virginian Railway Company** has announced effective June 1, 1955, **Mr. W. O. Robinson** is appointed General Agent with offices at 3-224 General Motors Building, Detroit 2, Mich., vice Mr. H. H. Clapp, retired.

Also effective June 1, 1955, **Mr. W. V. C. Brown** is appointed Commercial Agent, Roanoke, Va., succeeding Mr. W. O. Robinson, promoted.

NEW PLANTS

(Continued from page 16)

Blvd. at Ardmore St. Irving R. Klein & Associates, 1317 Austin St., Archts.

HOUSTON — F. W. Heitmann Co. plans warehouse and office building on 10-acre tract at Old Clinton Road and Kress St., David O. Roemer, 2410 Drexel St., Archt.

HOUSTON — Thompson-Hayward Chemical Co. let contract to Walter Kidde Constr. Co., Box 8044, for office and warehouse, 1703 Oliver St., at \$230,000.

HOUSTON — U. S. Gypsum Co. of Chicago let contract to Brown & Root, Inc., Box 3, Houston, for paper plant on North side of Ship Channel, across from Manchester Terminal.

KERRVILLE — Kerrville Coca-Cola Bottling Co. let contract to W. A. Sullivan, 415 Elm St., for bottling plant on Junction Highway. Ralph H. Cameron, 1519 Transit Tower, San Antonio, Archt.

KING MILL, GRAY CO. — Celanese Corporation of America, Kings Mill, Gray County, plans addition to plant to double capacity.

MADISONVILLE — Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, let contract to Erwin Broecker, Belleville Highway, Brenham, for dial building.

MIDLAND — Union Oil Co. let contract to C. W. Nugent, Union Oil Bldg., for commercial building, Hodgins & Dennis, 300 N. Jackson, Designers.

PALESTINE — Palestine Industrial Foundation, Inc., let contract to Will Krause & Son, P. O. Box 190, at \$89,000 for wall tile factory, P. L. Hazelwood, 14 Link Bldg., Archts.-Engrs.

POINT COMFORT — Aluminum Co. of America, Commerce Bldg., Houston, let contract to Farnsworth & Chambers Co., Inc., Box 74, Houston, for paving and foundations for new smelting rooms electric generating plant and mechanical building.

PORT ARTHUR — The Texas Co., 135 E. 42nd St., New York, plans research and testing facilities, Augustus C. Long, president.

PORT ARTHUR — Texas Co. let contract to O. W. Collins, Box 472, at \$588,722 for Texas refinery, laboratory building, two structures, Stone & Pitts, 1872 Calder Ave., Beaumont, Archts.-Engrs.

ROCKDALE — Aluminum Co. of America, Gulf Bldg., Pittsburgh 19, Pa., let contract to Mosher Steel Co., Dallas, Tex., for addition to plant.

SAN ANTONIO — Central Warehouse & Storage Co., 220 Burleson St., plans warehouse and office building on Coliseum Drive. John Chenault, 1506 Fredericksburg Road, Archt.

SAN MARCOS — Cone Mills, Inc., Greensboro, N. C., plan textile mill to cost approximately \$8,000,000.

SEGUIN — Sagebiel's, Seguin, Tex., received bid from J. C. Evans Constr. Co., Inc., Box 4054, Austin 51, at \$143,789 for commercial building, consisting of home, auto store and service station. Fehr & Granger, 502 E. 5th St., Austin, Archts.

VIRGINIA

CHESTERFIELD CO. — Reynolds Co., 2500 S. Third St., Louisville, Ky., plan \$3,000,000 aluminum extrusion plant, J. Louis Reynolds, Vice-president, in charge of operations.

CROZET — Morton Packing received bid from Charlottesville, Va., Lumber Co. at \$29,585 for garage, S. J. Makielaki, Charlottesville, Archt.

LURAY — Bradley's Funeral Home received bid from Baughan Constr. Co., Luray, at \$63,690 for new building, J. Raymond Mims & Sons, Arlington, Va., Archts.

NORFOLK — Ford Motor Co., G. L. Lemone, Manager of Norfolk plant, plan \$387,000 improvements which will more than double capacity for producing autos in 2-tone colors.

RICHMOND — Chesapeake & Potomac Telephone Co. of Virginia received bids for addition and tower to building, 703 E. Grace St. Merrill C. Lee, 601 E. Franklin St., Richmond, Archt.

YORKTOWN — American Oil Co. let contract to The Lummus Company, New York, for coking unit at new refinery.

WEST VIRGINIA

RAVENSWOOD — Kaiser Aluminum & Chemical Corp., Ravenswood, received bids for office building, employment building, guardhouse and garage.

SPENCER — Spencer Mfg. Co., John E. Martin, president, plans \$125,000 dye plant.

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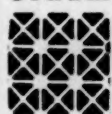
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